



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

August 2, 2010

Charlene Dwin Vaughn, AICP
Assistant Director, Office of Federal Agency Programs
Federal Permitting, Licensing and Assistance Section
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Suite 809
Washington, D.C. 20004

Re: Finance Docket No. 35090, The Alaska Railroad Corporation – Petition for
Exemption to Construct and Operate a Rail Line to Port MacKenzie, Alaska:
**Invitation to Participate in the Undertaking, Review and Comment on a
Draft Programmatic Agreement**

Dear Ms. Vaughn:

The Surface Transportation Board (Board), acting as the lead Federal agency, invites the Advisory Council on Historic Preservation (ACHP) to join in consultations with the Board, Alaska Railroad Corporation (ARRC) and the Alaska State Historic Preservation Officer (SHPO) regarding mitigation or minimization of possible adverse effects resulting from the proposed Port MacKenzie Rail Extension (proposed rail line or undertaking). The Federal Railroad Administration and a number of Native Alaskan tribes and tribal organizations have also been invited to participate.

Description of the Undertaking

The STB is evaluating a petition from ARRC, pursuant to 49 U.S.C. § 10502, requesting authority to construct and operate a new rail line from Matanuska-Susitna Borough's Port MacKenzie to connect with the existing ARRC rail system between Wasilla and north of Willow Alaska. On March 16, 2010, the Board's Section of Environmental Analysis (SEA) issued a Draft Environmental Impact Statement (Draft EIS) under the National Environmental Policy Act (NEPA) to evaluate potential impacts associated with the undertaking. The Draft EIS considers the potential impacts of a number of alternative routes for the proposed rail line. SEA is currently reviewing public comments on the Draft EIS. A vicinity map illustrating the location of the undertaking is provided in Exhibit 1.

A Board decision on whether to issue the license to construct and operate the proposed rail line meets the definition of an "undertaking" under the National Historic Preservation Act

(NHPA). SEA has initiated the consultation process, pursuant to Section 800.14(b) of the regulations (36 C.F.R. Part 800) implementing Section 106 of the NHPA (16 U.S.C. § 470f), and the draft Programmatic Agreement (PA), which is attached as Exhibit 2. SEA sent a copy of the draft PA to the Alaska SHPO on March 16, 2010; however, we have not received comments on the document to date.

The Area of Potential Effects (APE), described in more detail in the draft PA, includes the 200-foot-wide right-of-way, areas where the ground would be disturbed by construction and additional areas that could contain properties sensitive to audible and visual effects.

Steps Taken to Identify Historic Properties

On March 8, 2008, SEA met with the SHPO to discuss a methodology for assessing potential effects to cultural resources caused by the proposed undertaking. On June 19, 2008, SEA submitted a work plan for identifying and evaluating historic properties within the APE. The work plan used a combination of desktop predictive modeling and on-the-ground testing to evaluate cultural resources within the APE, and the work plan is included in the draft PA (see Attachment C of Exhibit 2). SEA intends to have additional consultation with the Alaska SHPO and Tribes to discuss the draft PA and other cultural resources concerns and we would like to invite you to participate in that consultation.

SEA performed an initial literature review and consulted the Alaska Heritage Resources Survey database and other databases to identify known cultural resources in the study area. A review of scoping documents indicated the prominence of snow machine and all-terrain-vehicle use, which combines the trails' historic dog sledding and skiing uses with modern recreational use.

A cultural resources field survey by SEA in 2008 was limited to areas within the proposed 200-foot ROW, where direct effects to cultural resources would be most likely to occur. SEA developed a probability model for guiding cultural resource surveys along the various rail line alternatives using available Geographic Information System data inputs (e.g., previously documented cultural resource locations, historic trails, waterways, and Dena'ina place names) to generate maps identifying areas of low, moderate, and high probability for cultural resources. SEA used this probability model and information from the field survey to identify potential impacts to cultural and historic resources. Areas with a greater likelihood of having cultural resources nearby include banks along streams, lakes, and other waterways; ridges and other promontories; other known sites and Dena'ina place names; and trails. Wetland areas are considered to have the lowest potential to have cultural resources. SEA selected a sample of the total number of miles of the proposed alternatives for the cultural resources survey.

A three-person survey crew performed the SEA field surveys. Crew members were spaced 20 meters (about 65 feet) apart and used handheld Global Positioning System units to guide them along transect routes following or paralleling the centerline of the ROW. The areas surveyed included all probability levels (low, moderate, and high) along the ROW to focus on high- and medium-probability levels and include a sampling of low-probability areas. The field

crew surveyed 25.5 of the 115 miles of proposed alternatives. The SHPO reviewed the field research design before the survey.

Description of Potentially Affected Historic Properties

We have enclosed a copy of the cultural resources survey reports that were completed in 2008 and 2009 for this undertaking (see Exhibits 3 and 4, respectively), which describe the potential historic properties identified as a result of the work plan and survey efforts. In addition, we have enclosed relevant sections of the Draft EIS (Exhibit 5, Draft EIS Appendix I and Exhibit 6, Draft EIS Chapter 6) which describe the potential historic properties identified within the APE and the larger study area. The attached information is summarized as follows:

There are 56 known prehistoric sites within 1 mile of the ROW, 29 of which were discovered during SEA's field surveys in September and October 2008. Most of the sites consist of what are called cache pits, which were used for storage, processing, or freezing foods; and large semi-subterranean house pits, called *nichil* in Dena'ina, used for permanent or winter homes. A determination of eligibility for inclusion in the *National Register* has not been conducted for any of the prehistoric sites. For more detailed descriptions of these prehistoric sites, see Exhibit 5, Draft EIS Appendix I.

Alaska Heritage Resources Survey Sites in the Study Area			
	Prehistoric	Historic	Total
Previously Documented Alaska Heritage Resources Survey Sites ^a	27	15	42
2008 Port MacKenzie Rail Extension Survey Documented Alaska Heritage Resource Sites	29	7	36
Totals	56	22	78

^a Source: Draft EIS, 2010.

There are 22 historic sites within 1 mile of the proposed ROW. Most of the historic sites consist of historic structures, including bridges, roadhouses, cabins, and railroad stations. Seven of the historic sites listed were discovered during SEA's surveys for the proposed rail line. These sites include two cabins, one shooting blind, and three trails. A determination of eligibility for inclusion in the *National Register* has not been made for any of the historic sites, except for a 1917 Alaska Railroad Corporation (ARRC) bridge at Mile Post 180.8 (determined not eligible) and 1917 ARRC bridge at Mile Post 187.7 (determined eligible). For more detailed descriptions of these historic sites, see Exhibit 5, Draft EIS Appendix I.

In addition, SEA considered dog sledding associated with the Iditarod National Historic Trail and Iditarod Race to be a cultural landscape assumed eligible for inclusion in the *National Register*. The boundary for contributing resources to the dog sledding landscape extends beyond the study area and would include the remainder of the Iditarod National Historic Trail and other trails, kennels, and locations associated with the landscape's periods of significance. A preliminary boundary for this landscape in the study area includes the trail network (including the historic trail and race) associated with the 1898 to 1925 and 1967 to 1978 periods of significance and the buildings, kennels, and locations that contribute to the significance of these

periods, including the Aurora Dog Mushers Club, Knik Kennels, and Knik Museum and Dog Mushers Hall of Fame. For additional context and maps of this cultural landscape, see Exhibit 6, Draft EIS Chapter 6.

Description of Potential Effects

SEA has prepared a draft PA for this undertaking because the nature and extent of potential impacts are not completely known at this time. The nature and extent of potential impacts depend on the alternative that ARRC receives the authority to construct and operate (if any), additional field survey to identify the extent of certain eligible properties, ability of ARRC to adjust track centerline to minimize or avoid impacts to eligible properties, and other final design considerations. However, the undertaking has the potential to affect historic properties as follows:

- Archaeological sites in the rail line ROW could be inadvertently or purposefully destroyed through surface and subsurface disturbances, primarily during construction. Therefore, these sites would lose their eligibility for listing in the National Register. Such disturbances would include soil removal or other operations that could cause erosion or contamination and could destroy the context of the archaeological site and its overall integrity. The numerous salmon streams in the area are host to archaeological sites in and adjacent to the streambeds. Proposed rail crossings of these streams, and changes in stream flow, could affect those archaeological sites.
- Cabins and other structures, and historic sites within the ROW would be disturbed or destroyed. Historic and potentially historic trails would be blocked in the case of unofficial trails. Officially recognized trails would be grade-separated or relocated, facilitating free passage; however, the integrity of any historic trails would still be adversely affected through the introduction of auditory and visual effects. Historic properties within 1 mile of the ROW could be adversely affected and lose their context and integrity through visual and audible effects. The sight of a railroad in the viewscape would be an adverse effect, as would the noise of passing trains, and construction and support vehicles. Trail blockage of officially recognized and unofficial trails could occur during construction, and unofficial trails would be blocked during rail line operation. Depending on the timing of construction activities and/or locations of installed crossings, some trail routes could be altered. Changes to dog sled, snow machine, and all-terrain vehicle routes could cause the loss of access to or use of the trails and associated historic landscapes and properties. All of the alternatives cross the Iditarod National Historic Trail, thereby increasing the visual and auditory effects on the historic integrity of the trail and its ancillary network.
- The dog sledding cultural landscape would be adversely affected to varying degrees through loss of visual integrity, cultural privacy, potential loss of or changes to access, and changes to traditional or culturally significant use of and connection to the property. It is likely that the proposed rail line would affect the dog sledding cultural landscape, because noise and visual effects would reduce the quality of this landscape for users. Officially recognized trails would be grade-separated, thereby reducing impediments to

free passage. However, the integrity of any historic trails would still be adversely affected through the introduction of auditory and visual effects, and access across the study area by dog sledders who travel across unofficial trails that are contributing resources to the dog sledding landscape would be impeded. Furthermore, contributing trails (e.g., Corral Hill Trail) that would not be crossed could be adversely affected by the proposed rail line if the rail line blocks non-contributing trails (e.g., parts of the West Gateway Trail System) that are used to access the contributing trail.

The table below summarizes the effects of the undertaking on historic properties for each alternative, and detail is provided in Exhibit 6, Draft EIS Chapter 6.

Summary of Impacts to Potential Historic Properties by Alternative					
Alternative	Historic Trails Intersected by Right-of-Way	Known Cultural Resources within the 200-Foot Right-of-Way	Additional Known Cultural Resources within Project Area^a	Known Dog Sledding Contributing Resource Trails Intersected by Right-of-Way^b	Total
Mac East-Connector 3-Willow	4	17	23	7	51
Mac West-Connector 1-Willow	4	13	18	11	46
Mac East-Big Lake	2	10	23	4	39
Mac West-Connector 2-Big Lake	2	6	19	9	36
Mac East-Connector 3-Houston-Houston North	2	4	17	3	26
Mac East-Connector 3-Houston-Houston South	2	5	14	3	24
Mac West-Connector 1-Houston-Houston North	2	0	12	8	22
Mac West-Connector 1-Houston-Houston South	2	1	9	8	20

^a Outside the 200-Foot ROW but within 1 mile of the centerline. One mile equals the maximum extent for indirect auditory and direct visual effects.

^b Number may include historic trails identified under "Historic Trails Intersected by Right-of-Way" column

Source: Draft EIS, 2010.

Conditions or Future Actions to Avoid, Minimize or Mitigate adverse effects

SEA prepared a draft PA for this undertaking because the nature and extent of potential impacts, and the conditions or actions to avoid, minimize or mitigate adverse effects on historic properties are not completely known at this time.

Officially recognized trails would be grade-separated or relocated, facilitating free passage; however, the integrity of any historic trails would still be adversely affected through the introduction of auditory and visual effects. It is also likely that the proposed rail line would

affect the dog sledding cultural landscape, because noise and visual effects would reduce the quality of this landscape for users. Any mitigation for the effects on the historic trails and dog sledding cultural landscape would be developed through the PA.

SHPO and Tribal Consultation

Consultation with Native American tribes in the vicinity of the proposed rail line is ongoing. Consultation was initiated as part of the Board's Government-to-Government Consultation and Coordination Plan (see Exhibit 7, Draft EIS, Appendix B). A total of 10 Federally Recognized Tribes, tribal groups, and Alaska Native Regional Corporations have been contacted as part of the government-to-government consultation and coordination. Several consultation meetings to date regarding Section 106 consultation and cultural resource issues have occurred between SEA, SHPO, Matanuska-Susitna Borough Historic Preservation Commission and Knik Tribal Council. As a result of the consultation meetings with SHPO on March 5, 2008, and February 24, 2009, four potential cultural landscapes of dog sledding, recreation, homesteading, and agriculture have been evaluated for eligibility to the NRHP and potential effects from the proposed rail line on the one eligible landscape, dog sledding, was assessed in the Draft EIS (see Exhibit 6, Draft EIS Chapter 6).

Consultation meetings with the Knik Tribal Council and the Matanuska-Susitna Borough Historic Preservation Commission on February 27, 2009, April 3, 2009, and May 15, 2009 resulted in the identification of the additional potential Dena'ina cultural landscape. The May 15th consultation meeting also resulted in the suggestion to look at the dog sledding and Dena'ina landscapes in the broader theme of a potential transportation landscape in the APE and larger study area. Evaluation of the study area as a transportation landscape is ongoing and its eligibility or ineligibility for listing in the *National Register* will be determined during the Section 106 process through the PA. Additional details on the Tribal Consultation are provided in the draft PA (see Attachment B of Exhibit 2).

In response to the consultation requests, documentation of the potential Dena'ina landscape began in June 2009 with a series of interviews with Dena'ina respondents living near and within the study area. These interviews focused on identifying landscape characteristics that typified historic uses and questions regarding continued use of the study area as part of an ongoing Dena'ina cultural legacy. Landscape characteristics identified during this process included circulation features (e.g., trails and water routes), archaeological sites, land use, and cultural traditions. This documentation as well as evaluation of the integrity of identified Dena'ina landscape characteristics is ongoing. If the Dena'ina cultural landscape is determined eligible, potential effects would be analyzed and mitigated through the Section 106 process and PA mechanism.

On July 23, 2008, the Alaska SHPO acknowledged receipt and acceptance of the *Cultural Resources Work Plan* (See Attachment C of Exhibit 2 for the work plan), and provided comments on the APE for direct and indirect effects and the extent of the study area. SHPO also noted that the variables of the predictive model appear reasonable, provided an outline for the methodology for completing Section 106 consultation, and asked that mitigation for the Iditarod National Historic Trail be incorporated into the PA (see Exhibit 8).

On February 5, 2009, the STB sent a letter to all of the Tribes and Alaska native organizations notifying them of the initiation of the Section 106 consultation process, asking them for assistance in identifying cultural resources in the project area, and asking if they were interested in participating as a consulting party to the draft PA. Consultation completed with specific Tribes and Alaska native organizations included:

- August 20, 2008, **Knikatu, Inc.** requested a meeting with the STB and cooperating agencies at a tribal facility and indicated they want to continue to receive project information by mail and participate in the public involvement process. A follow-up phone call was made on December 9, 2008, and while an immediate meeting was not necessary, the request was made that the Knikatu, Inc. be informed if the Houston route is selected. The Knikatu, Inc. would like to receive project information by mail and participate in the public involvement process, and may request a meeting with the STB later.
- September 3, 2008, **Native Village of Tyonek** indicated they want to continue to receive project information by mail and participate in the public involvement process.
- April 1, 2009, **Eklutna, Inc.** indicated they have no interest in the project and further consultation is not required.
- February 27, 2009, a consultation meeting was held with the **Knik Tribal Council** and the **Matanuska-Susitna Borough (MSB) Historical Commission** with STB's consultant archaeologist. The majority of the meeting focused on Knik Tribal Council's desire to have the discussion of Dena'ina be broadened to a cultural landscape level and focus on not only prehistoric and ethnographic resources, but also the contemporary cultural practices of the Dena'ina and how these practices reflect their past as well as show the Dena'ina as a living part of the landscape today. The MSB Historical Commission representatives agreed with the Knik Tribal Council's concerns regarding Dena'ina cultural resource documentation and that the Dena'ina review should be expanded to a broader cultural landscape discussion.
- November 13, 2009, follow-up phone calls were made to all Tribes and Alaska native organizations to confirm their role in the PA as a consulting party or to continue to be included in the document circulation and contact lists.
- In a letter dated May 10, 2010, the **Cook Inlet Region, Inc. (CIRI)** indicated that they would like to participate in the PA. CIRI was included in the Attachment A3 of the draft PA, Tribes and Alaska Native Organization Contact List and was included in the Government-to-Government consultation plan. The STB also sent CIRI a copy of the Draft EIS, which contained the draft PA.

We have enclosed a copy of the draft PA for your review and comment if you choose to participate. The draft PA includes a process to complete identification of historic properties and assessment of effect, develop treatment, and monitoring. As previously stated, our office sent a

copy of the draft PA to the Alaska SHPO on March 16, 2010; however, we have not received comments on the document to date.

Thank you for your participation in this project. If you have any questions, please do not hesitate to contact Dave Navecky, SEA's Project Manager, at 202-245-0294, or Alan Summerville, ICF's Project Manager, at 703-934-3616.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with a large initial "V" and a stylized "R".

Victoria Rutson
Chief
Section of Environmental Analysis

Enclosures:

- Exhibit 1: Vicinity map
- Exhibit 2: Draft PA
- Exhibit 3: Cultural Resources Survey Report, 2008
- Exhibit 4: Cultural Resources Survey Report, 2009
- Exhibit 5: Draft EIS, Appendix I
- Exhibit 6: Draft EIS, Chapter 6
- Exhibit 7: Draft EIS, Appendix B
- Exhibit 8: Letter from the Alaska SHPO to SEA, dated July 23, 2008

cc: Judith Bittner, SHPO (w/o enclosures)

EXHIBIT 1
VICINITY MAP

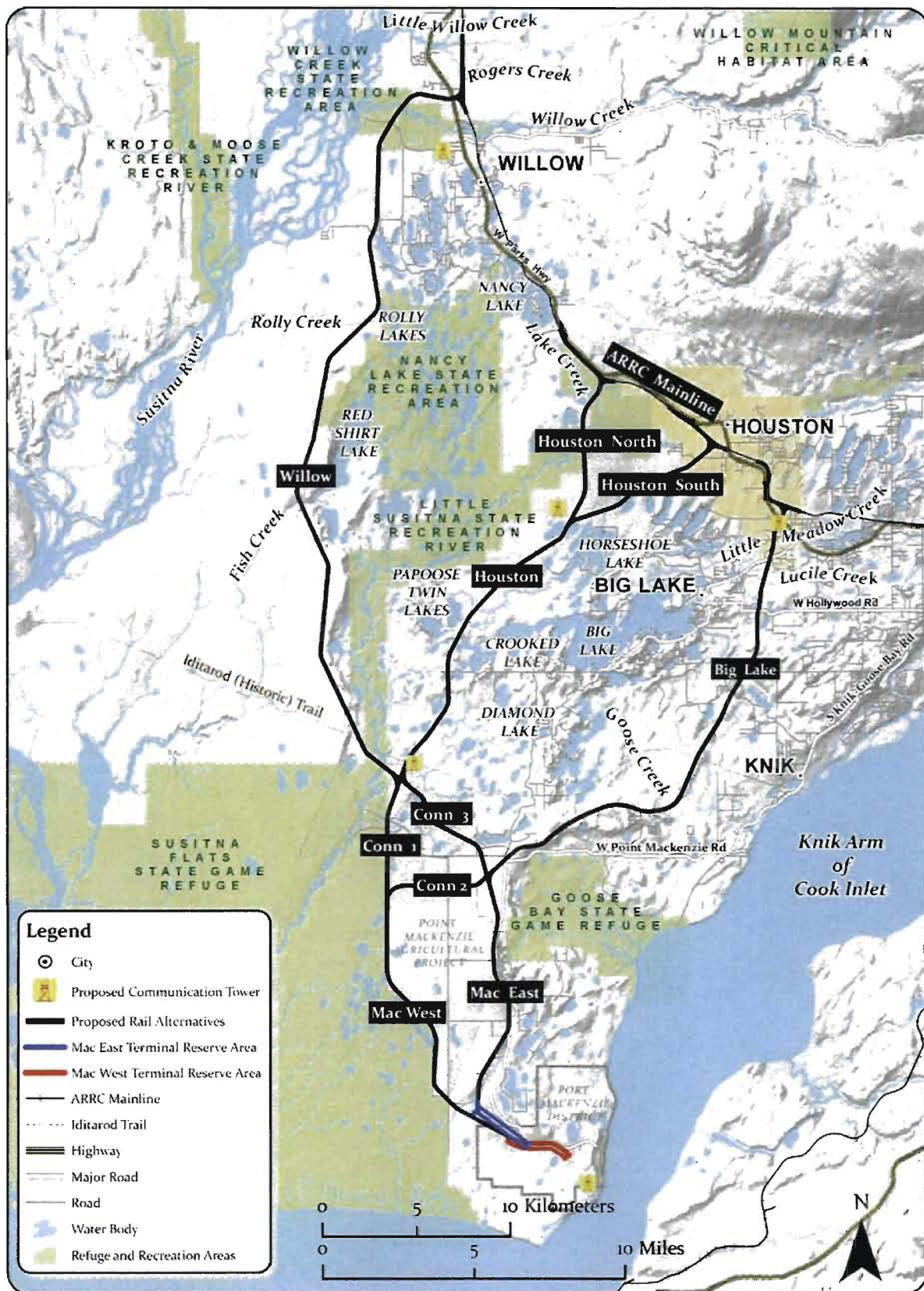


Figure S-1. Overview of Proposed Port MacKenzie Rail Extension Route Alternatives

EXHIBIT 2
DRAFT PA

DRAFT PROGRAMMATIC AGREEMENT

Among

**Surface Transportation Board,
Advisory Council on Historic Preservation,
Federal Railroad Administration, and
Alaska State Historic Preservation Officer,**

Regarding

**The Alaska Railroad Corporation Construction and Operation of a Rail Line Extension to
Port MacKenzie, Alaska**

STB Finance Docket No. 35095

J.1 Draft Programmatic Agreement

WHEREAS, the Surface Transportation Board (STB)¹, the lead Federal agency, has received an application from the Alaska Railroad Corporation (ARRC or applicant) to construct and operate approximately 30 to 45 miles of the proposed rail line to connect the Port MacKenzie District in Matanuska-Susitna Borough (MSB) to a point on the existing ARRC main line between Wasilla and north of Willow, Alaska (Undertaking); and,

WHEREAS, the STB has determined that the proposed project is an Undertaking subject to Section 106 of the National Historic Preservation Act, (Section 106) 16 U.S.C. 470(f), which may have an effect upon properties included in or eligible for inclusion in the National Register of Historic Places (NRHP), *i.e.*, "historic properties" as defined at 36 CFR 800.16 (l)(1), the full extent of which will not be known until after execution of this Agreement; and,

WHEREAS, the STB is in consultation with the Advisory Council on Historic Preservation (ACHP); Federal Railroad Administration (FRA); and the Alaska State Historic Preservation Officer (SHPO), pursuant to Section 800.14(b) of the regulations (36 CFR Part 800) implementing Section 106; and,

WHEREAS, the STB, ACHP, FRA, and the SHPO are Signatories pursuant to 36 CFR 800.6(c)(1) and have authority to execute, amend or terminate this Draft Programmatic Agreement (Agreement); and,

WHEREAS, the FRA is a Signatory because it may provide grant funding to ARRC for the Undertaking; and,

WHEREAS, the Knik Tribal Council is an Invited Signatory pursuant to 36 CFR 800.6(c)(2) because it attaches a religious and/or cultural significance to the Dena'ina cultural landscape that may be affected by the Undertaking and has the same authority to amend or terminate this Agreement as Signatories; and

WHEREAS, the ARRC is an Invited Signatory pursuant to 36 CFR 800.6(c)(2) and has the same authority to amend or terminate this Agreement as Signatories.

WHEREAS, the State of Alaska's Department of Natural Resources (ADNR) is a Concurring Party pursuant to 36 CFR 800.6(c)(3) because it is a major land holder in the study area for some alternatives and if the STB licenses an alternative that crosses ADNR land, ADNR would need to grant right-of-ways associated with the Undertaking; and

¹ The Surface Transportation Board (STB) was created with the passage of the ICC Termination Act of 1995 (Pub. L. No. 104-88). The STB, an independent agency administratively housed within the U.S. Department of Transportation, is responsible for administering rail, pipeline, and certain adjudicatory functions involving motor and water carriers. These responsibilities are similar to those duties formerly administered by the Interstate Commerce Commission. The STB is the lead agency under the National Environmental Policy Act (NEPA) for the Port MacKenzie Rail Extension Project.

WHEREAS, the STB has consulted with and continues to consult with the Indian Tribes and Alaska native corporations (Tribes) listed in Attachment A of this Agreement who may attach a religious and/or cultural significance to properties that may be affected by the Undertaking and these Tribes have been invited to participate in this Agreement as Concurring Parties; and

WHEREAS, the Matanuska-Susitna Borough (MSB) is a Concurring Party pursuant to 36 CFR 800.6(c)(3) because it is a certified local government under the NHPA (16 U.S.C. 470a(c)) and therefore has the ability to manage its own historic properties; and

WHEREAS, the refusal of any party invited to concur with this Agreement does not invalidate the Agreement; and,

WHEREAS, the STB, in consultation with the SHPO, has established the Undertaking's Area of Potential Effects (APE), as defined at 36 CFR 800.16(d), as the following: The APE for direct effects would include the 200-foot-wide right-of-way as well as areas where the ground will be disturbed such as staging areas, work camps, cut and fill areas, material sources/gravel quarries, overburden disposal areas, associated buildings/structures (e.g., sidings, bridges, etc.) and associated infrastructure (e.g., communication towers, power lines, etc.). Indirect effects may include an APE larger than the 200-foot right-of-way, may include vibration, noise, and access to trails and traditional use areas, and are dependent on the frequency of railroad traffic and the sensitivity of the historic property. The APE for visual effects may extend beyond the 200 foot right-of-way, and is dependent on topography, vegetation and the built environment beyond the right-of-way, the visual sensitivity of the historic property, and whether that portion of the Undertaking would be constructed at-grade or above-grade; and,

WHEREAS, the STB, as lead Federal agency, in conjunction with the FRA the United States Army Corps of Engineers, Alaska District (USACE); and U.S. Coast Guard, Seventeenth Coast Guard District (USCG) (i.e., cooperating agencies) has prepared an Environmental Impact Statement (EIS) in accordance with the requirements of the National Environmental Policy Act (NEPA) to address the potential impacts of the Undertaking on a variety of human and natural resources; and,

WHEREAS, the STB, in consultation with the Signatories and Invited Signatories, developed a *Cultural Resources Work Plan: Proposed Port MacKenzie Rail Extensions Project, Port MacKenzie to Willow, Alaska STB Finance Docket No. 35095 (ID Plan)* for inventory of potentially-eligible historic properties prior to construction, and has conducted potentially-eligible historic properties inventories for a range of alternatives, which were subsequently narrowed down for inclusion in the EIS; and,

WHEREAS, the STB has made a reasonable and good faith effort to identify and evaluate historic properties within the APE for the purposes of comparing impacts in the EIS, including 59 prehistoric cultural resources, 23 historic cultural resources, the Dena'ina cultural landscape and the Iditarod National Historic Trail and Iditarod Race cultural landscape; and,

WHEREAS, the STB has deferred, until after the STB licenses an alternative, the final identification, evaluation, assessment of effect and consideration of alternatives to avoid,

minimize, or mitigate effects to historic properties that may be affected by this Undertaking, and the Signatories have agreed to develop this Agreement in accordance with 36 CFR 800.14(b)(1)(ii) to provide for the phased identification of historic properties and evaluate effects to historic properties caused by construction of the Undertaking that cannot be fully assessed at this time; and, .

NOW, THEREFORE, the Signatories and Invited Signatories to this Agreement consent that the proposed Undertaking shall be implemented in accordance with the following stipulations in order to consider the effect of the Undertaking on historic properties.

J.2 Stipulations

The STB shall ensure that the following measures are carried out:

I. Administrative Considerations

- A. The Signatories shall attach this Agreement or the measures (stipulations) called for in this Agreement to any Record(s) of Decision (ROD), approved permit(s), or other condition(s) issued for this Undertaking so that this Agreement and its requirements become legally enforceable and binding on those actions.
- B. This Agreement and all of its requirements shall be binding on ARRC, as the current applicant for the STB authorization, and on its heirs, successors, and assignees.
- C. The Signatories shall enforce the terms of this Agreement, approvals, and other conditions that incorporate this Agreement and its terms. Each shall notify the others if any of them becomes aware of an instance of possible non-compliance with the terms and conditions of this Agreement or permit or conditions as they relate to this Agreement. In such case, the Signatories shall ensure compliance consistent with their legal authorities and consult with the other agencies, as needed.

II. Applicability of this Agreement and Area of Potential Effects

- A. This Agreement shall apply to the Undertaking licensed by the STB and all components of it, including the APE, actions specified in the EIS, permits and other approvals so long as they are within the jurisdiction of the Signatories.
- B. The STB will provide final determinations of eligibility for the National Register and findings of effect to the SHPO for concurrence for only those sites that are identified within the APE for the alternative licensed by the STB, if any. Any future refinements to the APE in conjunction with this Undertaking shall be made in consultation with the SHPO, consistent with 36 CFR 800.4.
- C. The STB shall ensure that all work carried out pursuant to this Agreement will be done by or under the direct supervision of historic preservation professionals who meet the appropriate Secretary of the Interior's Professional Qualifications Standards (36 CFR 61 Appendix A).

III. Tribal Consultation

The STB initiated consultation with the Tribes listed in Attachment A.3 of this Agreement regarding the Section 106 process, in conjunction with the preparation of the EIS. Consultation will continue as the terms of this Agreement are carried out. No later than 60 days after issuance of any STB Final Decision granting ARRC the authority to construct and operate the Undertaking, and prior to the initiation of construction, the STB, in consultation with the SHPO and Tribes, shall complete a Plan for Tribal Consultation (PTC) that outlines procedures for agencies to consult with tribal organizations in carrying out the terms of this Agreement. The STB shall submit this PTC to the Tribes and provide them an opportunity to comment and decide if the terms are acceptable. The PTC shall describe when and how Tribes shall be consulted, the contact names and information for each organization (Attachment A.3), procedures for review of treatment plans (as appropriate), and other matters. A draft of the PTC is included as Attachment B to this Agreement and the PTC may be amended as needed. The procedures in the PTC will be integrated into the ID Plan and the agencies' implementation of this Agreement as necessary. All Federal agencies who endorse the Agreement will be provided with a copy of the PTC and agree to implement its terms.

IV. Identification of Historic Properties and Assessment of Effects

- A. Additional identification and evaluation efforts for historic properties affected by the alternative licensed by the STB will be required as follows:
 1. Any areas of surface/subsurface disturbance related to this Undertaking and within the jurisdiction of STB authority, including rail alignments as well as associated facilities, staging areas, and borrow areas, which are outside the 200-foot-wide APE surveyed in the Port MacKenzie Rail Extension Project Report of 2008 Cultural Resources Fieldwork (the 2008 Field Survey).
 2. Portions of the alternative for which ARRC has received authority from the STB to construct and operate that were not surveyed during the 2008 Field Survey.
 3. Previously identified sites within the surveyed APE and along the alternative that may receive authorization from the STB to construct and operate, which require additional evaluation to establish boundaries and/or to assess the effects of the Undertaking.
- B. Additional identification and evaluation shall conform with Federal and state guidelines for fieldwork in Alaska, be compatible with previous investigations for this Undertaking, follow the *Cultural Resources Work Plan: Proposed Port MacKenzie Rail Extensions Project, Port MacKenzie to Willow, Alaska STB Finance Docket No. 35095* (ID Plan, Attachment C) approved by the SHPO with comment on July 23, 2008, and may include a phased approach to testing and evaluation. Additional archaeological survey work shall meet the minimum level of effort to meet Level II (Evaluation Phase) survey requirements by the SHPO (i.e., gathering sufficient data for a determination of eligibility to the National Register but no determination of site boundaries).

- C. Should any non-archaeological properties be identified in the APE for the alternative licensed by the STB, the STB shall ensure that a historian or architectural historian who meets the Secretary of the Interior's Professional Qualifications Standards shall consult with SHPO and ARRC to establish the level of effort necessary to determine whether that property meets National Register criteria. Following consultation and agreement upon the level of effort, the STB shall make a reasonable and good faith effort to carry out the evaluation, and, prior to construction of the Undertaking, shall submit that determination to SHPO for review and concurrence, and shall distribute copies of the determination to all parties to this Agreement. The consultation, review, and concurrence for non-archaeological properties shall be coordinated with the reports submitted for the relevant segment(s) of the alternative licensed by the STB that are prepared for archaeological sites in accordance with Stipulations IV.D. through IV.H.
- D. The STB shall evaluate properties identified in the APE according to the survey method described in the ID Plan already developed and prepare a Cultural Resources Survey Report (CRSR) for each segment(s) of the alternative licensed by the STB, if any. The CRSR will describe each located property, and the property's known content and context. The CRSR will also indicate which archaeological resources present in the APE can be evaluated at the Phase I survey level as not eligible for the National Register, and present a justification for these evaluations. Properties evaluated as not eligible at the Phase I level will not require further testing and evaluation. The CRSR shall also identify areas of sensitivity where monitoring shall occur during construction, even though no historic properties have been identified in those areas. The CRSR shall include a summary of all previous CRSRs prepared for this Undertaking, make recommendations for the sequence and schedule for preparing additional CRSRs, and provide Section 106 review status of the remainder of segments in the selected alternative.
- E. Additionally, for each segment(s) of the alternative licensed by the STB that contains identified properties, if any, for which eligibility cannot be determined at the Phase I level, a Level II Testing and Evaluation Plan (TEP) shall be prepared. The TEP document may be combined with the CRSR. The TEP shall include the initial survey results and the proposed scope of archaeological testing efforts to establish the boundaries of historic properties located through archaeological survey per the ID Plan. The TEP will also describe for each located resource or type of resource procedures for site testing and evaluation for eligibility to the National Register. Usually, these testing procedures will follow standard archaeological practices, for example, shovel probe grids, excavation units, and trenching. Testing will focus on assessing the extent, depth, artifact content, features, and integrity of each archaeological resource. The CRSR/TEP shall be distributed to all parties to this Agreement, and the comments of those parties, including SHPO and Tribes, should be taken into consideration before detailed evaluation testing takes place. SHPO concurrence will be required for the Phase II TEP and for sites evaluated as not eligible at the Phase I level; if

SHPO does not concur with a finding that the site is not eligible, an additional TEP document will be prepared for these resources.

- F. After the TEP is carried out, the STB shall prepare a Phase II Testing and Evaluation Report (TER) for each segment(s) that includes the results of testing and evaluation of archaeological sites that would be directly affected by construction of the alternative licensed by the STB. The STB shall distribute the TER(s) to SHPO and all consulting parties to this Agreement who shall have a 30-day review and comment period. Comments shall address the adequacy of the Evaluation Phase assessments and provide their recommendations for determination of eligibility based on National Register criteria (36 CFR 60.4). Based on the comments received, the STB may revise the TER(s) or may conduct additional Evaluation Phase surveys, testing or both. Any revised Final TER shall be submitted by the STB to SHPO and all consulting parties to this agreement for a second 15-day review. If any reviewing party has an objection to the Final TER(s), they shall notify the STB within 15 days of receiving the reports for review or the Final TER(s) shall be considered complete.
- G. If after full review by all parties to this Agreement, no historic properties were identified within the APE for a specific segment, and the results of the TER for that segment have been accepted by all reviewing parties, then construction of the proposed project in this segment may be allowed by the STB upon concurrence from the SHPO with a finding of no historic properties affected for that segment.
- H. If the studies result in the identification of properties that are eligible for the National Register, the STB shall assess adverse effects in accordance with 36 CFR 800.5 and distribute a Finding of Effect Report for each segment where historic properties were identified within the APE. The Finding of Effect Report(s) shall describe the assessment of potential adverse effects to historic properties that would result from the construction or operation of the project, and identify mitigation measures that would eliminate or minimize effects to be incorporated into the design and construction documents of the Undertaking. The STB shall distribute the Finding of Effect Report(s) to SHPO and all consulting parties to this Agreement, who shall have a 30-day review and comment period. The STB shall ensure that comments are responded to prior to finalizing the Finding of Effect Report(s) for submission to the SHPO for final review and concurrence. The SHPO shall have an additional 30 days for review and concurrence with the findings in the Finding of Effect Report(s).

V. Treatment of Historic Properties

- A. Any design changes, modifications, and refinements of the Undertaking shall endeavor to avoid impacts to cultural resources.
- B. For historic properties that cannot be avoided by the Undertaking and when the STB has made an adverse effect finding, ARRC shall develop treatment plans to minimize or mitigate the effects. Treatment plans shall be developed in consultation with all parties to this Agreement. During the preparation of treatment plans, the STB shall circulate a Draft Treatment Plan(s) to these parties, who will have 30 days to review

and provide comments. The STB shall consider the comments of these parties received within 30 days and incorporate comments received in the development of Final Treatment Plan(s). The Final Treatment Plan(s) shall be distributed to all parties who participated in their development for a final 30-day review and consultation period. Treatment plan(s) are considered final when the STB receives concurrence of the SHPO and any Tribes who participated in the development of the treatment plan(s). Under 43 CFR 7.7(a) "Protection of Archaeological Resources," tribes that consider any sites on public lands within the APE as having sacred or cultural importance have 30 days within which to comment on the treatment plans.

1. Most historic properties identified through the 2008 Field Survey are archaeological sites. For historic properties that are archaeological in nature and significant for their research data potential (criterion D), the treatment measures may follow standard mitigation through data recovery. Treatment plans for data recovery shall include, at a minimum, a research design with provisions for data recovery and recordation, analysis, reporting, and curation of resulting collection and records, and shall be consistent with the *Secretary of Interior's Standards and Guidelines* (48 FR 44734-44737). Treatment plans must be consistent with easement and permit requirements of other agencies, when applicable. To the extent possible, treatment plans should group related sites or areas, so that the treatment of related historic properties can be considered in context, and to minimize the burden of review and approval by agencies.
 2. A number of the historic properties identified during the 2008 Field Survey were sites relating to the historic period or were significant for values other than their potential research value (e.g., eligible under criterion A, B, or C), including the cultural landscape related to the Dena'ina cultural landscape and the Iditarod National Historic Trail and Iditarod Race cultural landscape. Treatment plans for such properties, if warranted, shall specify approaches for treatment or mitigation of the property in accordance with the principles, standards, and guidelines appropriate to the property's significance. This may include, but not be limited to, use of such approaches as relocating a historic property, re-landscaping to minimize indirect effects, public interpretation, ethnographic recordation, oral history, archival research, or modification of the Undertaking to minimize adverse effects. Methods of recordation and documentation described in the treatment plan shall conform to the *Secretary of the Interior's Standards for Architectural and Engineering Documentation* (48 FR 44730-44734) or other standards specified by the SHPO.
- C. In lieu of standard mitigation approaches described above, treatment plans may adopt other alternative approaches to minimize or mitigate effects to historic properties, including, but not limited to, assisting in the development of tribal historic preservation plans, developing detailed historic contexts for the region, developing educational materials, purchasing properties containing historic resources, or developing historic property management plans.

- D. Disputes or objections to treatment plans shall be resolved in accordance with stipulation XII below.

VI. Monitoring

- A. If stipulated as part of a treatment plan, when the probability to uncover unidentified archaeological or historic materials is determined likely by the consulting archaeologist or the SHPO, ARRC shall ensure that an archaeologist meeting the Secretary of the Interior's Standards and Guidelines (*36 CFR § 61, Appendix A, hereafter Standards and Guidelines*) is present to monitor specific ground-disturbing activities.
- B. The results of monitoring shall be included in a report to the STB and the SHPO and made available to all parties to this Agreement. This report shall be developed, within 3 months of fieldwork and be acceptable to both the STB and the SHPO.
- C. If sites are discovered during monitoring, ARRC shall follow the procedures outlined in Stipulation IX of this Agreement.
- D. If human remains are discovered during monitoring, ARRC shall follow the procedures outlined in Stipulation X and the Plan of Action (Attachment A).

VII. Curation

- A. ARRC shall ensure that all artifacts, faunal remains, samples, records and field notes, and related materials collected during activities covered by this Agreement are deposited in the University of Alaska Museum of the North in Fairbanks, or another repository or institution approved by the SHPO. The curatorial facility shall meet requirements found in 36 CFR Part 79, *Curation of Federally Owned and Administered Archaeological Collections*.
- B. Curation arrangements between ARRC, or their cultural resources consultant, and an approved institution must be part of any treatment plan.
- C. ARRC shall incur all reasonable costs charged by the approved institution for curation of materials collected in conjunction with recovery actions under this Agreement. "Reasonable costs" shall be determined by the curatorial facility and approved by the SHPO, and be consistent with professionally acceptable curatorial standards.
- D. Consistent with 36 CFR Part 79, collections shall be packaged in archival quality materials and in a manner appropriate to the material type. Collection preparation and packaging shall be acceptable to the SHPO and receiving institution, and consultation in advance is recommended.
- E. Materials collected in conjunction with recovery actions under this Agreement will remain the property of the landowner unless a gift or purchase agreement is negotiated.

VIII. Annual Meeting and Reports

- A. **Annual Meeting.** The STB shall hold a meeting of the Signatories and Invited Signatories, as well as the Concurring Parties if they so wish, within one year of any STB final decision granting ARRC the authority to construct and operate the Undertaking, and each year by that same date, thereafter until construction of the Undertaking is completed or this Agreement is terminated, to discuss the previous year's activities and activities scheduled for the upcoming year. The meeting shall be held in Anchorage at the Alaska Office of History and Archaeology or at another location by consensus of the Signatories and Invited Signatories. The parties may participate by telephone if they so desire and minutes of the meetings will be distributed as soon as possible afterwards.
- B. **Additional Meetings.** If any party deems a meeting necessary in addition to the annual meeting described above, their request shall be considered in consultation with the other parties.
- C. **Annual Report.** ARRC or their designated consultant shall prepare an annual report on the progress of implementation of the stipulations of this Agreement, and shall distribute it to all parties to this Agreement at least 45 days prior to the Annual Meeting. The annual report shall include the following:
1. A description of the tasks accomplished during the preceding year and anticipated upcoming efforts for identification, evaluation, mitigation, and protection of historic properties. This can include descriptions of sites, artifacts encountered, or other archaeological or historic materials encountered, including representative photographs and illustrations;
 2. A description of the progress of the Undertaking and any known or expected changes to the Undertaking;
 3. An evaluation of the effectiveness of this Agreement and whether any amendments or changes are needed based on deficiencies or project modifications.
- D. **Additional Reporting.** Implementation of this Agreement shall include administrative reporting on progress as well as the preparation of technical reports on resource investigations. The reporting shall use the following procedures unless modifications to this reporting structure are agreed to by the STB, the SHPO, and Invited Signatories and reflected in the ID Plan.
1. **Progress reports.** Progress reports shall be submitted quarterly by ARRC to the STB for the duration of the construction portion of the Undertaking following execution of this Agreement. Progress reports may be in letter format and shall describe fieldwork activities for historic properties as well as relevant construction progress that was initiated, underway, or completed for the most recent performance period, and identify steps to be initiated, continued, or completed in the next quarter. These reports may be combined with other STB reporting requirements.

2. Progress summaries. Progress summaries shall be submitted by the STB to the SHPO and Invited Signatories every six months for the duration of the construction portion of the Project. The first progress summary shall be distributed six months following execution of this Agreement, with subsequent summaries following each six months thereafter until the construction portion of the Undertaking is completed. The progress summaries shall identify steps initiated, underway, or completed for the most recent performance period and identify steps to be initiated, continued, or completed in the next six-month period.
3. Preliminary field reports. Preliminary reports on the progress of historic property fieldwork shall be prepared by ARRC that demonstrate the completion of test and evaluation, data recovery, or other procedures, investigations and site treatments approved in the treatment plans. The use of preliminary field reports is designed to facilitate a phased approach to resource evaluation and mitigation, as provided for in 36 CFR 800, and to facilitate reasonable construction planning and progress. Preliminary field reports may be included in, but do not take the place of, the CRSRs prepared in Stipulation IV.D. and TER(s) prepared in Stipulation IV.F.
4. Technical reports. Technical reports describing the results of background research, fieldwork activities, and laboratory analyses shall be prepared by ARRC according to the standards and permit guidelines appropriate to the resource, including final report standards for archaeological excavation. The extent of report distribution as well as procedures for review of draft and final technical reports shall be in accordance with Stipulations IV, V and VI. ARRC shall issue final technical reports no later than two years from the completion of fieldwork activities and, in consultation with the SHPO, shall prepare sufficient copies for dissemination to the Concurring Parties, appropriate public libraries, educational institutions, and other repositories.

IX. Procedures for Inadvertent or Unanticipated Discoveries

- A. Upon the inadvertent discovery of a potential historic property in any activity's APE, all work in the vicinity shall immediately cease and ARRC shall protect the discovery site against further disturbance.
- B. Upon the inadvertent discovery of human remains, sacred objects, or mortuary objects in any activity's APE, all work in the vicinity shall immediately cease and a plan of action for the treatment of human remains (Attachment A) shall be implemented. ARRC shall ensure that any and all human remains, sacred objects, and objects of cultural patrimony discovered as a result of activities related to the Undertaking will be treated with dignity and respect.
- C. Upon the unanticipated discovery of cultural resources during construction that are not human remains, the Unanticipated Discoveries Plan shall be followed (Attachment A.2).

X. Treatment of Human Remains

It is the intent of this Undertaking to avoid the disturbance or removal of any human remains. No activity will knowingly disturb human graves or human remains. If human remains, sacred objects, or mortuary objects are inadvertently discovered during the course of construction or operation, all activities in the vicinity shall immediately cease and the Plan of Action (POA) for the treatment of human remains (Attachment A) shall be implemented. The STB and ARRC shall ensure that any and all human remains, sacred objects, and objects of cultural patrimony discovered as a result of the Undertaking shall at all times be treated with dignity and respect. Notification and consultation with Tribes shall be conducted in accordance with PTC described above in Stipulation III.

XI. Training

- A. On an annual basis, ARRC will ensure that on-site supervisory-level employees and contractors are trained in procedures for identifying and reporting historic properties that may potentially be discovered during the course of their work. The training shall be developed with sensitivity to concerns of Tribes and offer the opportunity for a tribal representative to meet in person with employees and contractors if a Tribe so requests. Minimally, the training shall include guidelines for identification of cultural resources, and notification procedures when archaeological materials, human remains, and historic period sites are discovered.
- B. ARRC shall also ensure that its supervisory-level contractors and employees are advised against the illegal collection of historic and prehistoric materials, including human remains, and are familiarized with the scope of applicable laws and regulations.
- C. Prior to the implementation of training, the curriculum shall be reviewed and approved by the STB, the SHPO, Tribes, and MSB.
- D. Training shall be conducted by an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61). However, ARRC's supervisory level employees and contractors may attend the above training and convey the information to staff unable to attend.
- E. On an annual basis, and included in the annual report prepared under Stipulation VIII.C, ARRC shall supply to the STB and the SHPO a list of employees and contractors who attended the annual training, and procedures through which the information was conveyed to employees and contractors who did not attend.

XII. Dispute Resolution

Should any party to this Agreement object within 30 days of any treatment plan or report provided for review or actions proposed pursuant to this Agreement, the STB and the SHPO shall consult with the objecting party to resolve the objection.

- A. If the STB and/or the SHPO determine that the objection cannot be resolved, the STB shall forward all documentation relevant to the dispute to the ACHP. Within 30 days after receipt of all pertinent documentation, the ACHP will either:

1. Provide the STB with recommendations, which the agency will take into account in reaching a final decision regarding the dispute; or
 2. Notify the STB that it will comment pursuant to 36 CFR 800.7, and proceed to comment. Any ACHP comment provided in response to such a request shall be taken into account by the STB with reference to the subject of the dispute. The STB will provide a copy of its written response to ACHP comments or final decision on any dispute to all parties to the Agreement before proceeding. Any recommendation or comment provided by the ACHP shall be understood to pertain to the subject of the dispute; the STB's responsibility to carry out all actions under this Agreement that are not the subjects of the dispute shall remain the same.
- B. At any time during implementation of the measures stipulated in this Agreement, should an objection to any such measure or its manner of implementation be raised by a member of the public, the STB shall take the objection into account and consult as needed with the objecting party, the SHPO, or the ACHP to resolve the objection.

XIII. Amendments

Any Signatory or Invited Signatory to this Agreement may make a request to the STB that the other Signatories consider amending it, whereupon the parties shall consult to consider the amendment(s). Amendments will be executed in the same manner as the original Agreement. Concurring Parties may suggest proposed amendments to the Signatories and Invites Signatories, who shall consult to consider them.

XIV. Termination

Any Signatory or Invited Signatory to this Agreement may terminate it by providing 30 days notice to the other parties explaining the reasons for the termination. The Signatory or Invited Signatory shall consult during this period to seek agreement on amendments or other actions that will avoid termination. In the event of termination, the STB will comply with 36 CFR 800.1 through 800.7 on remaining Undertaking components, activities, or outstanding issues.

XV. Duration

This Agreement shall become effective upon execution by the STB, FRA, the ACHP and the SHPO, and shall remain in effect for a term of five years from its date of execution, at which point the Agreement may be renewed.

XVI. Execution and Implementation

Execution and implementation of this Agreement evidences that the STB and FRA have satisfied responsibilities under Section 106 of the National Historic Preservation Act pursuant to 36 CFR 800.

J.3 Signatories

J.3.1 Participating Signatories

Surface Transportation Board

By: _____ Date: _____
Victoria Rutson, Chief, Section of Environmental Analysis

Advisory Council on Historic Preservation

By: _____ Date: _____
John M. Fowler, Executive Director

Alaska State Historic Preservation Officer

By: _____ Date: _____
Judith E. Bittner, State Historic Preservation Officer

Cooperating Federal Agencies

Federal Railroad Administration

By: _____ Date: _____
Mark Yachmetz, Associate Administrator for Railroad Development

J.3.2 Invited Signatories

Tribes

Knik Tribal Council

By: _____
Jack Alcorn, Executive Director

Date: _____

Applicant

Alaska Railroad Corporation

By: _____
Patrick K. Gamble, President

Date: _____

J.3.3 Concurring Parties

Agencies

State of Alaska, Department of Natural Resources

By: _____
Director, Division of Mining, Land, and Water

Date: _____

Matanuska-Susitna Borough Historical Commission

By: _____
Fran Seager-Boss, Cultural Resources Specialist

Date: _____

Tribes

Chickaloon Village Traditional Council

By: _____
Gary Harrison, Chief

Date: _____

Native Village of Eklutna

By: _____
Dorothy Cook, President

Date: _____

Native Village of Tyonek

By: _____
Angela Sandstol, President

Date: _____

J.4 References

- ADNR, OHA (Alaska Department of Natural Resources, Office of History and Archaeology). Not dated. Alaska Heritage Resources Survey. Anchorage, AK: Database on File with State Office of History and Archaeology.
- ADNR, OHA. Not dated. Citations Database. Anchorage, AK: Database on file with State Office of History and Archaeology.
- ADNR, OHA. 2003a. Determination of Eligibility. Historic Preservation Series Number 7.
- ADNR, OHA. 2003b. Review and Compliance Program Guidelines for Section 106 Consultation with the State Historic Preservation Office. Historic Preservation Series Number 8.
- ADNR, OHA. 2004. SURF Database. Anchorage, AK: On file with State Office of History and Archaeology.
- HDR Alaska, Inc. and TNH-Hanson, LLC. 2008. Preliminary Environmental and Alternatives Report for the Port MacKenzie Rail Extension Project. 4 Volumes. Prepared for the Matanuska-Susitna Borough and the Alaska Railroad Corporation, Anchorage, AK.
- NPS (National Park Service). Not dated. Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines [As Amended and Annotated], Secretary of the Interior's Standards for Archeological Documentation. Online at http://www.cr.nps.gov/local-law/arch_stnds_7.htm
- NPS (National Park Service). Not dated. National Register of Historic Places. Online at: <http://www.cr.nps.gov/nr/nrlist.htm>
- NPS. 1997. How to Apply the National Register Criteria for Evaluation. National Register Bulletin 15. U.S. Department of the Interior, National Park Service, National Register, History and Education. Online at: <http://www.cr.nps.gov/nr/publications/bulletins/nrb15/>
- Parker, P. L., and T. F. King. 1998. Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin (revised). U.S. Department of the Interior, National Park Service, National Register, History and Education, National Register of Historic Places.
- SRB&A. 2008. Port MacKenzie Rail Extension Project Report of 2008 Cultural Resources Fieldwork. Prepared for Surface Transportation Board. Washington, DC.

J.5 Glossary of Terms and Acronyms

Adverse Effect: When an undertaking may alter, directly or indirectly, the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects may include reasonably foreseeable effects caused by the Undertaking that may occur later in time, be farther removed in distance, or be cumulative.

Area of Potential Effects: The Area of Potential Effects (APE) means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the Undertaking. Determination of the APE may take into account the professional standards, guidance, and research of both the historic properties and railroad design professions.

Borrow Area(s): An excavated area where material has been or will be dug for use as fill at another location.

Consulting Parties: Consulting parties include the SHPO, Indian tribes, representatives of local governments, applicants for Federal assistance, permits, licenses and other approvals, and certain individuals and organizations with a demonstrated interest in the Undertaking.

Cultural Resource: any tangible or observable evidence of past human activity, regardless of significance, found in direct association with a geographic location, including tangible properties possessing intangible traditional cultural values.

Curation: The preservation of material remains that are excavated or removed during a survey, excavation, or other study of a prehistoric or historic resource, and associated records that are prepared or assembled in connection with the survey, excavation or other study.

Days: Calendar days.

Eligible for the National Register of Historic Places: In order to be eligible for the National Register the property must have been either formally determined as such in accordance with regulations of the Secretary of the Interior and/or meet the National Register criteria.

Federal Agency(s): Any Federal entity with a statutory obligation to fulfill the requirements of Section 106 who has jurisdiction over an undertaking and takes legal and financial responsibility for Section 106 compliance in accordance with 36 CFR 800 Subpart B. The Federal Agency(s) has approval authority for the Undertaking and can commit the Federal agency to take appropriate action for a specific undertaking as a result of Section 106 compliance.

Historic Property: Any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian Tribe and that meet the National Register criteria.

Human Remains: The physical remains of a human body.

ID Plan: Identification Plan Entitled *Cultural Resources Work Plan: Proposed Port MacKenzie Rail Extensions Project, Port MacKenzie to Willow, Alaska* STB Finance Docket No. 35095 (ID Plan) approved by the SHPO with comment on July 23, 2008.

Indian Tribe: As presently defined in 36 CFR 800.16(m), an Indian Tribe, band, nation, or other organized group or community, including a federally-recognized Native Village, Regional Corporation or Village Corporation, as those terms are defined in Section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602) which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Keeper of the National Register: The Keeper is the individual who has been delegated the authority by the National Park Service (NPS) to list properties and determine their eligibility for the National Register. The Keeper may further delegate this authority as he or she deems appropriate.

NAGPRA: Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et. seq.).

National Register: The National Register means the National Register of Historic Places maintained by the Secretary of the Interior.

National Register Criteria: National Register criteria means the criteria established by the Secretary of the Interior for use in evaluating the eligibility of properties for the National Register (36 CFR 60). The National Register of Historic Places criteria are listed below:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship and feeling and:

- that are associated with the events that have made a significant contribution to the broad patterns of our history; or
- that are associated with the lives of persons significant in our past; or
- that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- that yielded, or may be likely to yield, information on prehistory or history.

Criteria considerations: ordinarily cemeteries, birthplaces, or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations, commemorative in nature; and properties that have achieved their significance within the past 50 years shall not be considered eligible for the National Register of Historic Places (36 CFR 60.4).

NRHP: National Register of Historic Places.

DPA: Draft Programmatic Agreement.

SHPO: State Historic Preservation Officer.

Site: Site definition is different for each state but is generally defined by Willey and Phillips (1958:18), as any reasonably definable spatial unit that contains features or is fairly continuously covered with artifacts that are indicative of an occupation 50 years or older. A site may be defined as "a spatial cluster of cultural features, or items, or both" (Binford 1972:46). These definitions apply to both prehistoric and historic sites. Archaeological context may be defined by the inclusion of any of the following: soil staining, associated fire-cracked rock, ceramics, features, or a concentration of materials within a reasonably defined spatial boundary.

STB: Surface Transportation Board.

Traditional Cultural Properties: A Traditional Cultural Property can be defined generally as an object, site, landscape feature, or other form of feature that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that communities' history, and (b) are important in maintaining the continuing cultural identity of the community. For additional information, reference Parker and King, 1995.

Treatment Plan: A proposal for the mitigation of effects upon any historic property that a project would affect. It can include data recovery, documentation, restoration or other measures.

Undertaking: An undertaking is a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency. This includes those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, those requiring a Federal permit, license or approval, and those subject to state or local regulation pursuant to a delegation or approval by a Federal agency. For this PA, the Undertaking refers to the STB's review of an application for the construction and operation of a rail line by the ARRC, extending its existing system between the Matanuska-Susitna Borough and a point between Wasilla and north of Willow, Alaska.

ATTACHMENT A

PLAN OF ACTION FOR THE TREATMENT OF UNANTICIPATED DISCOVERY OF HUMAN REMAINS, GRAVES AND HISTORIC PROPERTIES

A.1. Human Remains and Graves

The Native American Graves Protection and Repatriation Act (NAGPRA) regulations (43 CFR 10), do not apply to the Undertaking because it would not occur on Federal lands. The following steps must be taken if human remains, or suspected human remains, are discovered:

1. Should human burials be encountered, work will be stopped at once in the locality and the STB, the SHPO and the Alaska State Troopers (AST) shall be contacted immediately. See below for contact numbers.
2. If the human remains appear recent in the judgment of the archaeologists, the STB shall defer to the opinion of the AST and Alaska State Medical Examiner (Alaska SME) for a determination of whether the remains are of a forensic nature and /or subject to criminal investigation.
3. If the racial identity of the human remains is in question, a physical anthropologist experienced in the analysis of human remains shall examine them. The physical anthropologist shall document, analyze, and photograph the remains so that an independent assessment of racial identity can be made. The physical anthropologist shall be afforded no more than 30 days time to conduct his or her analysis.
4. If the human remains are on Federal land and determined to be of Native American origin, the STB will follow NAGPRA regulations and procedures set forth in 43 CFR 10. If the human remains are not Native American, and a determination has been made by the AST and Alaska SME that a death investigation is not warranted, then the STB in consultation with the Alaska SME, will attempt to identify, locate and inform descendants of the deceased. If the human remains are to be moved, then the STB shall obtain any required permits from the Alaska State Bureau of Vital Statistics, and reinter the remains in a designated area.
5. The ARRC Project Manager should contact the following people or agencies within 24 hours of uncovering the remains (notification should include available information regarding the nature and extent of the remains and an accurate and precise location including GPS coordinates):

A. State Historic Preservation Officer (SHPO)

Judith Bittner
State Historic Preservation Officer
Alaska Department of Natural Resources
550 W. 7th Ave., Suite 1310
Anchorage, AK 99501-3565
Phone: (907) 269-8721
Fax: (907) 269-8908

B. Federal agency official in charge

Victoria Rutson
Chief, Section of Environmental Analysis
Surface Transportation Board
395 E Street SW
Washington, DC 20423
Phone: (202) 245-0295
Fax: (202) 245-0454

C. The appropriate land managing agency contact for the relevant parcel

D. The responsible Native representative for the area of discovery

Dorothy Cook
President
Native Village of Eklutna
26339 Eklutna Village Road
Chugiak, Alaska 99567
Phone: 907-688-6020
Fax: 907-688-6021

Curtis McQueen
Chief Executive Officer
Eklutna, Incorporated
16515 Centerfield Dr., Suite 201
Eagle River, AK 99577
Phone: 907-696-2828
Fax: 907-696-2845

Debra Call
Knik Tribal Council President
PO Box 871565
Wasilla, Alaska 99687-1565
Phone: 907-373-7991
Fax: 907-373-2161
dcall@kniktribe.org
dcall@alaskanative.net

Delia Call
Knik Tribal Council Secretary Treasurer
PO Box 871565
Wasilla, Alaska 99687-1565
Phone: 907-373-7991
Fax: 907-373-2161

Jack Alcorn
Executive Director
Knik Tribal Council
PO Box 871565
Wasilla, Alaska 99687-1565
Phone: 907-373-7991
Fax: 907-373-2161

Raymond Theodore
President
Knikatnu, Incorporated
P.O. Box 872130
Wasilla, Alaska 99687-2130
Phone: 907-376-2845
Fax: 907-376-2847

Angela Sandstol
President
Native Village of Tyonek
PO Box 82009
Tyonek, Alaska 99682-0009
Phone: 907-583-2201
Fax: 907-583-2442

Gary Harrison
Chief
Chickaloon Village Traditional Council
P.O. Box 1105
Chickaloon, AK 99674-1105
Phone: 907-745-0707
Fax: 907-745-0709

Donita Hensley
President
Tyonek Native Corporation
1689 C St., Suite 219
Anchorage, AK 99501-5131
Phone: 907-272-0707
Fax: 907-274-7125

Edith Baller
President
Chickaloon-Moose Creek Native Association, Inc.
P.O. Box 875046
Wasilla, AK 99687
Phone: 907-373-1145
Fax: 907-373-1004

Gloria O'Niell
President and Chief Executive Officer
Cook Inlet Tribal Council
3600 San Jeronimo Dr.
Anchorage, AK 99508
Phone: 907-793-3600
Fax: 907-793-3602

E. The Alaska State Troopers

Communications Center Manager
Phone: (907) 451-5100
Fax: (907) 451-5165

6. The ARRC Project Manager should contact the following people, though not necessarily within the first 24 hours:

A. Alaska State Medical Examiner's Office

Dr. Katherine Raven, Chief Medical Examiner
Phone: (907) 334-2200
Fax: (907) 334-2216
Email: Stanton.kessler@alaska.gov

Kenneth Cramer, Death Investigator
Phone: (907) 334-2200
Fax: (907) 334-2216
Email: Kenneth.Cramer@alaska.gov

B. Alaska Bureau of Vital Statistics

Phillip Mitchell, Chief
Phone: (907) 465-8643
Fax: (907) 465-3618
Email: Phillip.Mitchell@alaska.gov

Janet Shea
Phone: (907) 465-8608
Fax: (907) 465-4689
Email: Janet L Shea janet.brown@alaska.gov

Aaron Leggett
Dena'ina Cultural Historian
Alaska Native Heritage Center
8800 Heritage Center Drive
Anchorage, Alaska 99504
Phone: 907-330-8000
Fax: 907-330-8030
info@alaskanative.net

Margaret L. Brown
President and Chief Executive Officer
Cook Inlet Region, Inc.
2525 C Street, Suite 500
P.O. Box 93330
Anchorage, Alaska 99509-3330
Phone: 907-274-8638
Fax: 907-263-5183

Fran Seager-Boss
Matanuska Susitna Borough Historic Commission
Matanuska Susitna Borough
Cultural Resources Specialist
350 East Dahlia Avenue
Palmer, Alaska 99645
fseagerboss@matsugov.us

A.2. Plan for Unanticipated Discoveries

Historic properties may be encountered above ground and below ground during work on the Undertaking, and might include historic and prehistoric materials as well as Traditional Cultural Properties. In the event that cultural materials are discovered, this plan shall be followed, and implemented in compliance with the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. § 470) as well as implementing regulations (36 CFR 800).

If archaeological or historic materials are encountered the following series of steps must be followed:

1. Stop all work in the immediate vicinity of any historic properties or suspected cultural resources.
2. Mark the area in which the resources are located, as well as a minimum buffer area with a radius of 20 meters surrounding them. This buffer area may be larger if there is the possibility of more resources in the area or in the case of slopes or cut banks where ongoing work may impact the site. Make sure that all cultural materials are protected from possible impacts while contacting the appropriate parties².
3. ARRC's Project Manager should contact the people or agencies in the previous list at A.1(6)(a) through (e) within 24 hours of discovering the resources.

Notification of unanticipated discoveries should include available information regarding the nature and extent of the historic properties and an accurate and precise location including GPS coordinates.

The discovery shall be investigated by a professional meeting the appropriate qualification standards, such as a consulting archaeologist, no longer than seventy-two (72) hours from discovery. The STB, the SHPO, ARRC and land managing agency (as appropriate) shall consult, by telephone or other means, on the nature of the discovery and whether any additional investigation is warranted. The STB shall contact the appropriate Tribal representative if necessary. A decision shall be provided to ARRC within five (5) working days. If the parties agree that the discovery is not significant, verbal authorization to proceed may be given by the SHPO, and the SHPO shall provide written confirmation to the parties within five (5) working days. A report of the investigation shall be provided by the investigator, following the guidelines for Monitoring described in Stipulation VII. If additional investigation is agreed to, the guidelines for Additional Investigations described in Stipulation III.B. shall be followed, unless modified evaluation and reporting are agreed to.

A.3. Tribes and Alaska Native Organization Contact List

Federally Recognized Tribes

Gary Harrison, Chief
Chickaloon Village Traditional Council
Send information to:
Jennifer Harrion, Executive Director
P.O. Box 1105
Chickaloon, AK 99674-1105
Phone: 907-745-0707
Fax: 907-745-0709

² Options for protecting the cultural resources include: covering with a tarp or other protection from the elements; shoring up cut banks or trench walls so that no further exposure occurs; making sure that no water will collect on or around the site.

Dorothy Cook, President
Native Village of Eklutna
26339 Eklutna Village Road
Chugiak, Alaska 99567
Phone: 907-688-6020
Fax: 907-688-6021

Debra Call, President
Knik Tribal Council
PO Box 871565
Wasilla, Alaska 99687-1565
Phone: 907-373-7991
Fax: 907-373-2161
dcall@kniktribe.org
dcall@alaskanative.net

Delia Call, Secretary Treasurer
Knik Tribal Council
PO Box 871565
Wasilla, Alaska 99687-1565
Phone: 907-373-7991
Fax: 907-373-2161

Jack Alcorn, Executive Director
Knik Tribal Council
PO Box 871565
Wasilla, Alaska 99687-1565
Phone: 907-373-7991
Fax: 907-373-2161

Angela Sandstol, President
Native Village of Tyonek
PO Box 82009
Tyonek, Alaska 99682-0009
Phone: 907-583-2201
Fax: 907-583-2442

Alaska Native Corporations

Curtis McQueen, Chief Executive Officer
Eklutna, Incorporated
16515 Centerfield Dr., Suite 201
Eagle River, AK 99577
Phone: 907-696-2828
Fax: 907-696-2845

Raymond Theodore
Knikatu, Incorporated
P.O. Box 872130
Wasilla, Alaska 99687-2130
Phone: 907-376-2845
Fax: 907-376-2847

Donita Hensley, President
Tyonek Native Corporation
1689 C St., Suite 219
Anchorage, AK 99501-5131
Phone: 907-272-0707
Fax: 907-274-7125

Edith Baller, President
Chickaloon-Moose Creek Native Association, Inc.
P.O. Box 875046
Wasilla, AK 99687
Phone: 907-373-1145
Fax: 907-373-1004

Gloria O'Niell, President and Chief Executive Officer
Cook Inlet Tribal Council
3600 San Jeronimo Dr.
Anchorage, AK 99508
Phone: 907-793-3600
Fax: 907-793-3602

Margaret L. Brown, President and Chief Executive Officer
Cook Inlet Region, Inc.
2525 C Street, Suite 500
P.O. Box 93330
Anchorage, Alaska 99509-3330
Phone: 907-274-8638
Fax: 907-263-5183

Other Organizations

Aaron Leggett, Dena'ina Cultural Historian
Alaska Native Heritage Center
8800 Heritage Center Drive
Anchorage, Alaska 99504
Phone: 907-330-8000
Fax: 907-330-8030
info@alaskanative.net

ATTACHMENT B

PLAN FOR TRIBAL CONSULTATION

B.1. Introduction

Executive Order (EO) 13175 (65 FR 218), Consultation and Coordination with Indian Tribal Governments (November 6, 2000) directs Federal agencies to establish regular and meaningful consultation and collaboration with officials of Federally Recognized Tribal Governments (Tribes) in the development of Federal policies or decisions that have Tribal implications. The Environmental Impact Statement (EIS) for Alaska Railroad Corporation's (ARRC) Proposed Port MacKenzie Rail Extension will culminate in a Final Decision (i.e., Record of Decision) by the Surface Transportation Board (STB) and, as appropriate, subsequent permit decisions by other Federal agencies that constitute Federal decisions subject to the provisions of EO 13175.

The proposed ARRC Port MacKenzie Rail Extension has the potential to directly affect the environment, resources and rights of Tribes and Alaska native corporations located in Southcentral Alaska in the vicinity of the Knik Arm, Big Lake and the Little Susitna River. Potential effects to Tribal lands, rights, resources, religious or cultural sites and subsistence activities need to be identified, evaluated and discussed with Tribal Governments in order to comply with EO 13175, Section 106 of the National Historic Preservation Act of 1966 (see also 36 CFR Part 800, August 5, 2001) and other Federal regulations and policies.

B.1.1 Federally Recognized Tribal Governments in the Project Area

The U.S. Department of Interior, Bureau of Indian Affairs (BIA) maintains a list of 561 Federally Recognized Tribes (73 FR 66, April 4, 2008). Alaska Tribes in proximity to the proposed Port MacKenzie Rail Extension have been identified from this list. Proximity is defined as in or near the Little Susitna River and Knik Arm watersheds. The following Tribes, Tribal groups and Native corporations were notified by letter dated February 12, 2008 of the scoping process for the Port MacKenzie Rail Extension EIS, and have been advised that further information regarding government-to-government coordination would be forthcoming.

Federally Recognized Tribes

- Chickaloon Village Traditional Council
- Knik Tribal Council
- Native Village of Eklutna
- Native Village of Tyonek

Alaska Native Corporations

- Chickaloon-Moose Creek Native Association, Inc.
- Cook Inlet Region, Inc.
- Eklutna, Incorporated
- Knikatu, Incorporated
- Tyonek Native Corporation

B.1.2 Completed Consultation

The STB initiated consultation with the Tribes listed in Attachment A of this Agreement regarding the Section 106 process during the early scoping stages of the preparation of the EIS. The Government to Government Consultation and Coordination Plan prepared for this Undertaking on June 18, 2009, identifies the Tribes who were notified by letter, of the scoping process for the EIS on February 12, 2008. Attachment A. of this Agreement lists the Tribes and Alaska native organizations who have remained in consultation with the STB after the scoping process. On February 5, 2009, the STB sent a letter to all of the Tribes and Alaska native organizations notifying them of the initiation of the Section 106 consultation process, asking them for assistance in identifying cultural resources in the project area, and asking if they were interested in participating as a consulting party to this Agreement. Consultation completed with specific Tribes and Alaska native organizations included:

- August 20, 2008, **Knikatu, Inc.** requested a meeting with the STB and cooperating agencies at a tribal facility and indicated they want to continue to receive project information by mail and participate in the public involvement process. A follow-up phone call was made on December 9, 2008, and while an immediate meeting was not necessary, the request was made that the Knikatu, Inc. be informed if the Houston route is selected. The Knikatu, Inc. would like to receive project information by mail and participate in the public involvement process, and may request a meeting with the STB at a later date.
- September 3, 2008, **Native Village of Tyonek** indicated they want to continue to receive project information by mail and participate in the public involvement process.
- April 1, 2009, **Eklutna, Inc.** indicated they have no interest in the project and further consultation is not required.
- February 27, 2009, a consultation meeting was held with the **Knik Tribal Council** and the **Matanuska-Susitna Borough (MSB) Historical Commission** with STB's consultant archaeologist, Stephen R. Braun & Associates. The majority of the meeting focused on Knik Tribal Council's desire to have the discussion of Dena'ina be broadened to a cultural landscape level and focus on not only prehistoric and ethnographic resources, but also the contemporary cultural practices of the Dena'ina and how these practices reflect their past as well as show the Dena'ina as a living part of the landscape today. The MSB Historical Commission representatives agreed with the Knik Tribal Council's concerns regarding documentation of Dena'ina cultural resources and that they be expanded to a broader cultural landscape discussion.

- November 13, 2009, follow-up phone calls were made to all Tribes and Alaska native organizations to confirm their role in the Agreement as a consulting party or to continue to be included in the document circulation and contact lists.

B.1.3 Continuing Consultation

STB consultation with the Tribes will remain open throughout the duration of the Project and as the terms of this Agreement are carried out. Copies of the Project's Draft EIS and Final EIS shall be sent to all of these Tribes and Alaska native organizations for review. Both documents shall contain the draft Agreement as an appendix. If further research or analysis results in the identification of other Tribes with interests or cultural ties to the Project, they will also be added to the list of consulting Tribes. Consultation methods will vary depending on the requests from the Tribes. Consultation types may vary from letters, phone calls, on-site meetings and various levels of documentation for review, to jointly developing site specific treatment plans and/or agreement documents. Consultation may also vary according to the type of resource involved, the periods when the various tribes are known to have occupied the project vicinity, and which alternative is ultimately licensed by the STB.

B.1.4 Objectives of Consultation and Coordination

Consultation and coordination is the process of seeking, discussing, and considering the views of Tribes. Two-way communication that works toward consensus and reflects the concerns of the affected Tribes is the primary objective for the STB's consultation and coordination plan. Tribal sovereignty, culture, traditional values and customs will be respected during the consultation process.

The STB, U.S. Coast Guard and Federal Railroad Administration do not have specific guidance documents for consultation and coordination with Tribal Governments. Established guidance documents from the U.S. Department of Defense, U.S. Army Corps of Engineers - Alaska District, U.S. Environmental Protection Agency - Region 10, and State of Alaska were considered in development and implementation of the consultation and coordination plan for the Port MacKenzie Rail Extension Project EIS. Specific objectives for consultation include:

1. Engage all potentially affected Tribes early in the EIS process to identify issues that should be researched and analyzed in the EIS.
2. Maintain open and active communications with Tribes throughout the EIS process to identify places of traditional religious or cultural importance and potential effects to Tribal lands, rights, resources or subsistence activities in the vicinity of the proposed project.
3. Report to the Tribes in a credible and understandable manner on issues and concerns raised during the scoping process.
4. Respond to issues raised by the Tribes during scoping and on the Draft EIS.
5. Respond to issues raised by the Tribes on the Final EIS.

B.2. Implementation Plan

Providing Tribes with the opportunity to participate in the public scoping process is not the same as government-to-government consultation and coordination. The STB gave Tribal Governments an opportunity to consult at the start of the project and gave opportunities to consult prior to decision making. The STB shall ensure that additional coordination will take place as determined necessary or desirable by the Signatories and Tribes.

B.2.1 Completed Actions

The STB has completed the following sequence of actions:

1. Contacted each Tribal entity (as listed in Attachment A) by telephone to confirm the name, title and address of current leadership.
2. Transmitted a Tribal Consultation Initiation letter and Consultation Questionnaire to each Tribal entity describing the EIS and government-to-government consultation and coordination process, describing the proposed project and soliciting Tribal input on potential effects of the proposed project on Tribal lands, rights, resources, religious or cultural sites and subsistence activities. The consultation questionnaire offered several options for Tribal consultation.
 - A. Face-to-face meetings with the Signatories at a Tribal facility,
 - B. Scheduled teleconferences with the Signatories,
 - C. No further involvement in government-to-government consultation during the EIS process, or
 - D. Continued receipt of project information by mail and participation through the public involvement process.
3. Conducted initial meetings or teleconferences with interested Tribes and developed an agreement and process for continued consultation and coordination throughout EIS development.
4. Documented the government-to-government coordination with each Tribe that has occurred thus far and included it in the Draft, Final EIS and Administrative Record.

B.2.2 Future Actions

The STB plans the following actions to facilitate carrying out the terms of this Agreement:

1. The STB shall send all Tribes this Agreement and their ideas and preferences will be solicited concerning all parts of this Agreement that are Tribal-related. The Tribes will be able to send comments via mail, Email, or phone.

2. As appropriate, the STB shall solicit Tribal review of all identification efforts, assessments of effect, and treatment plans via mail, Email, or phone in accordance with Stipulations IV and V. of this Agreement and the list of contacts identified in Attachment A of this Agreement.
3. The STB shall notify the Tribes of meetings being held and reports being prepared in accordance with Stipulations VIII A. and B. and VIII D. of this Agreement

B.2.3 Native Allotments

In 1906, the Alaska Native Allotment Act authorized the Secretary of the Interior to allot individual Alaska Natives (Native) a homestead of up to 160 acres. The Department of the Interior's (Interior) Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA) are responsible for granting rights-of-way and handling disputes between allottees and holders of rights-of-way. If the STB licenses an alternative that may directly affect a Native Allotment, the STB shall notify BLM and BIA of the decision and provide detailed maps of the proposed railroad right-of-way to ensure that the allottees are properly notified, treated with respect, and their lawful rights observed as prescribed in 25 CFR Part 169.

ATTACHMENT C IDENTIFICATION PLAN (ID PLAN)

CULTURAL RESOURCES WORK PLAN

PORT MACKENZIE RAIL EXTENSION PROJECT PORT MACKENZIE TO WILLOW, ALASKA

Prepared for
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423
202-245-0245

and
ICF International
9300 Lee Highway
Fairfax, Virginia 22031
703-934-3603

5 June 2008

Stephen R. Braund & Associates
P.O. Box 1480
Anchorage, Alaska
907-276-8222
907-276-6117 (fax)
srba@alaska.net

C.1. Executive Summary

The Alaska Railroad Corporation (ARRC) intends to file a petition with the Surface Transportation Board (STB) requesting authority to construct and operate a new rail line from Matanuska-Susitna Borough's Port MacKenzie to the existing ARRC mainline between Wasilla and north of Willow in south-central Alaska. STB is the Federal agency responsible for granting authority for the construction and operation of the proposed new rail line. The Section of Environmental Analysis (SEA) is the office within the STB responsible for preparing the appropriate National Environmental Policy Act (NEPA) documentation for railroad construction and operation cases that come before the Board. SEA has issued a Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Port Mackenzie Rail Extension, a draft scope of study, and a notice of scoping meetings.

STB, through ICF International (ICF), has engaged Stephen R. Braund & Associates (SRB&A) to prepare the cultural resources portion of the EIS. The EIS will identify cultural resources in the project area, evaluate the impacts of the proposed action on the cultural resources for each of the alternatives, and recommend mitigation measures, as appropriate. On March 5, 2008, SEA, ICF, ENTRIX, Inc., SRB&A, and the State Historic Preservation Office met to discuss a methodology for assessing effects to cultural resources caused by the proposed action. This cultural resources work plan is a result of that meeting and includes a brief description of the project and project area, NEPA and NHPA regulations regarding assessment of effects to cultural resources from proposed projects, consultation with parties knowledgeable about cultural resources in the proposed project area, and existing knowledge including documented cultural resources and previous surveys in the project area. The work plan also includes a description of the methods proposed for assessing effects to cultural resources from the proposed project for both the NEPA and Section 106 process.

C.2. List of Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
ADNR	Alaska Department of Natural Resources
AHPA	Alaska Historic Preservation Act
AHRS	Alaska Heritage Resources Survey
AIRFA	American Indian Religious Freedom Act
ANCSA	Alaska Native Claims Settlement Act
APE	Area of Potential Effect
ARRC	Alaska Railroad Corporation
ARPA	Archaeological Resources Protection Act
BP	Before Present
CFR	Code of Federal Regulations
CMT	Culturally Modified Tree
DOE	Determination of Eligibility
DOT&PF	Alaska Department of Transportation and Public Facilities
EIS	Environmental Impact Statement
GIS	Geographic Information Systems
IRA	Indian Reorganization Act
MSB	Matanuska-Susitna Borough
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OHA	Office of History and Archaeology
SEA	Section of Environmental Analysis
SHPO	State Historic Preservation Office(r)
SRB&A	Stephen R. Braund & Associates
STB	Surface Transportation Board
USGS	U.S. Geological Survey

C.3. Introduction

The Alaska Railroad Corporation (ARRC) intends to file a petition with the Surface Transportation Board (STB) requesting authority to construct and operate a new rail line from Matanuska-Susitna Borough's (MSB) Port MacKenzie to the existing ARRC mainline between Wasilla and north of Willow in south-central Alaska. STB is the Federal agency responsible for granting authority for the construction and operation of the proposed new rail line. The Section of Environmental Analysis (SEA) is the office within the STB responsible for preparing the appropriate National Environmental Policy Act (NEPA) documentation for railroad construction and operation cases that come before the Board. ICF International is serving as the independent third-party consultant to SEA to assist with the NEPA review process. SEA has issued a Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Port Mackenzie Rail Extension, a draft scope of study, and a notice of scoping meetings.

STB, through ICF International (ICF), has engaged Stephen R. Braund & Associates (SRB&A) to prepare the cultural resources portion of the EIS. The EIS will identify cultural resources in the project area, evaluate the impacts of the proposed action on the cultural resources for each of the alternatives, and recommend mitigation measures, as appropriate. On March 5, 2008, SEA, ICF, ENTRIX, Inc., SRB&A, and the State Historic Preservation Office (SHPO) met to discuss a methodology for assessing effects to cultural resources caused by the proposed action. This cultural resources work plan is a result of that meeting and includes a brief description of the project and project area, NEPA and National Historic Preservation Act (NHPA) regulations regarding assessment of effects to cultural resources from proposed projects, consultation with parties knowledgeable about cultural resources in the proposed project area, and existing knowledge including documented cultural resources and previous surveys in the project area. The work plan also includes a description of the methods proposed for assessing effects to cultural resources from the proposed project for both the NEPA EIS and Section 106 process.

C.3.1 Project Description and Area of Potential Effects

Under NHPA, the area of potential effect (APE) includes those areas where cultural resources will be directly or indirectly affected by the proposed undertaking (36 CFR 800.16(d)). To effectively meet the obligations under Section 106 of the NHPA, which requires federal agencies to take the effects of federal undertakings on historic properties into account, the NEPA process will be coordinated with the Section 106 process as recommended at 36 CFR 800.8. Identification of cultural resources within and near the proposed route alternatives, the APE, will be conducted to assess the effects of the proposed project on cultural resources.

The proposed Port MacKenzie Rail Extension would involve the construction and operation of a new rail line connecting Port MacKenzie to a point on the ARRC main line between Wasilla and north of Willow, Alaska (Figure 1). The proposed rail line would provide freight services between the Port and Interior Alaska and would support the Port's continuing development as an intermodal and bulk material resources export and import facility. Major elements of the proposed rail extension would include between 30 and 45 miles of new railroad track; a 200-foot-wide right-of-way (100 feet on either side of the center line); crossings of local roads,

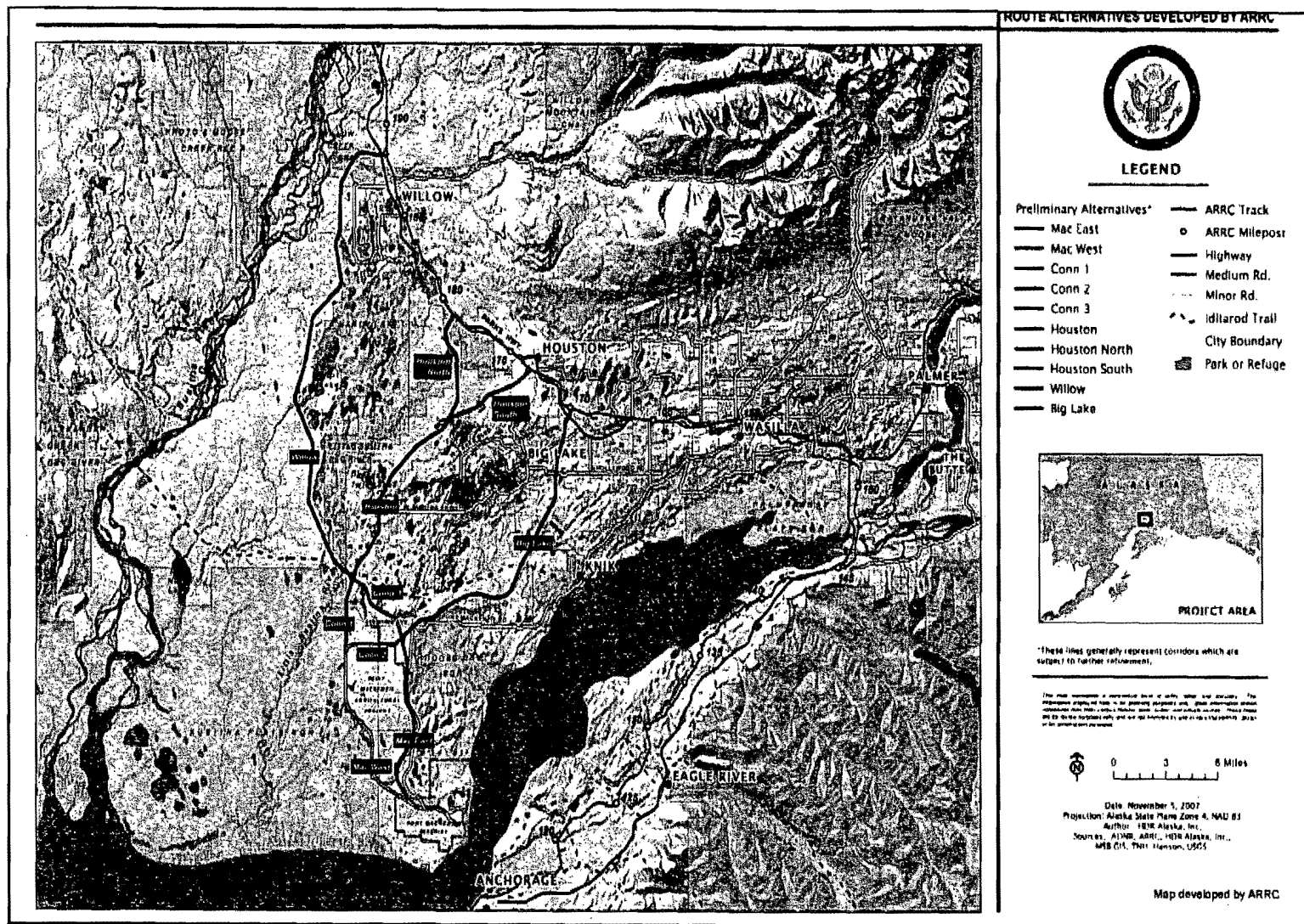


Figure 1. Port MacKenzie Rail Extension Project, Southcentral Alaska

streams, trails, and utility corridors; sidings; and ancillary facilities. The anticipated train traffic would be two trains daily on average, with one train per day traveling in each direction. The APE for direct effects would include the 200 foot wide right of way as well as areas where the ground will be disturbed such as staging areas, work camps, cut and fill areas, material sources/gravel quarries, overburden disposal areas, associated buildings/structures (e.g., sidings, bridges, etc.), and associated infrastructure (e.g., communication towers, power lines, etc.). Indirect effects could include a larger area than the 200 foot right of way.

C.3.2 Cultural Resources Regulations: The National Environmental Policy Act and Section 106 of the National Historic Preservation Act

NEPA requires a review of project and program impacts on the cultural environment, which generally includes historic structures, archaeological sites, historic districts, traditional cultural properties, anthropogenic landscapes, and other culturally valued places, as well as cultural use of a biophysical environment, and sociocultural attributes (e.g., social cohesion, social institutions, lifeways, religious practices, and/or other cultural institutions).

Direct effects to cultural resources are impacts to the characteristics of a cultural resource's quality, integrity, and association (36 CFR Part 800.5; 40 CFR 1508.8). Examples of direct effects to cultural resources from construction and/or operation of the proposed facilities could include physical destruction of or damage to all or part of the resource, removal of the resource from its original location, change of the character of the resource's use or of physical features within the resource's setting that contribute to its historic significance, change in access to traditional use sites by users, or loss of cultural identity with a resource. Indirect effects to cultural resources include those impacts resulting from the action that occur later in time or further removed in distance but still reasonably foreseeable (40 CFR 1508.8). Indirect effects on cultural resources could include modifications to the visual or aesthetic setting of an NRHP-eligible property. It also includes increased access to and close proximity of project components to culturally sensitive areas. This could result in a greater vulnerability of cultural resources to damage caused by project personnel and equipment during construction and operation of facilities and infrastructure.

NEPA requires consideration of context and intensity of an impact when describing its significance (40 CFR 1508.27). Context includes the affected society (e.g., local, regional, national), the affected region, the affected interests and the setting (or locality) of the proposed action (e.g., local, regional or national). Intensity includes consideration of geographic extent of the effect (e.g., limited, local or extensive), duration (e.g., one-time, intermittent or chronic), magnitude or amount of an impact, and likelihood or probability of an impact (e.g., certain, expected or actual). In the case of cultural resources, context applies to cultural resources located within the project area. Intensity for cultural resources includes the unique qualities of the resource, such as its eligibility for or listing on the NRHP, and the cumulative aspects of project impacts.

Compliance with Section 106 of the NHPA (16 USC 470) is required by law for all federal undertakings. Section 106 outlines the process for evaluating the effects of an undertaking on

historic properties. The process involves consultation with the SHPO, the Advisory Council on Historic Preservation (ACHP), Native American tribes, and other interested parties to determine the effects of federal actions; coordinating with other reviews (e.g., NEPA, Native American Graves Protection and Repatriation Act [NAGPRA], American Indian Religious Freedom Act [AIRFA], and Archaeological Resources Protection Act [ARPA]), identifying the SHPO, tribes, and other likely consulting parties, and planning to involve the public; identifying historic properties using the Secretary of the Interior's Standards and Guidelines (as outlined in 36 CFR 800.4; National Park Service [NPS] not dated); and evaluating all historic properties for NRHP eligibility on the basis of their significance (e.g., historical, archaeological, and/or cultural; see 36 CFR 60.4). The NEPA process generally involves partial completion of the Section 106 process by initiating consultation with agencies, tribes, and stakeholders, and by identifying cultural resources in the proposed project area to the extent that potential impacts of the proposed project can be reasonably determined.

NHPA defines historic properties as prehistoric and historic districts, sites, buildings, structures, and objects listed or eligible for inclusion on the NRHP including artifacts, records, and material remains related to the property (16 USC 470w, Sec. 301.5). A determination of eligibility (DOE) for the NRHP is based on a description and evaluation of a cultural resource, a statement of significance, and a selected list of sources, maps, photographs, or other illustrations. Consideration is given to both the criteria of significance and integrity of the site condition. The evaluation considers the historic context of the property, including its relation to other known historic properties (Alaska Department of Natural Resources, Office of History and Archaeology [ADNR, OHA] 2003a). For a cultural resource (districts, sites, buildings, structures and objects) to be eligible for the NRHP, it must possess integrity of location, design, setting, materials, workmanship, feeling and/or association. The NRHP (36 CFR 60.4) outlines the criteria for determining the eligibility for a historic property as follows:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history. (36 CFR 60.4)

An effect, for both Section 106 and NEPA, is when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP. The effect is considered adverse if it would impact the property in a manner that would diminish the property's integrity (location, design, setting, materials, workmanship, feeling, association) and/or its association under Criteria A-D, thus rendering it ineligible for the NRHP. There are several ways to minimize or mitigate effects to cultural resources. Mitigation under NEPA (40 CFR 1508.20), as it applies to cultural resources, involves:

- Avoiding the impact altogether by not taking a certain action or parts of an action (e.g., relocating a project component to avoid impact on an archeological site, a historic district, or an area of traditional use)
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation (e.g., altering the design of a project to reduce impacts)
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment (e.g., restoring impacted sites, landscapes, or buildings)
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environments (e.g., rehabilitating some buildings in exchange for demolishing others, conducting archeological data recovery or replacing areas used for cultural activities by providing access to other similar areas)

C.3.3 Consultation

As part of the preliminary environmental assessment for the Port MacKenzie project, the applicant contacted the SHPO, the Knik Tribal Council, the Knik Tribal Council Cultural and Historic Preservation Committee, and the MSB Cultural Resources Office to identify potential cultural resources in the project area. Responses from these organizations are included in the preliminary environmental report (HDR Alaska, Inc. and TNH-Hanson, LLC 2008). STB published a Notice of Intent in the Federal Register on February 12, 2008 and requested scoping input from the SHPO and local tribes at that time. STB intends to conduct consultation with SHPO, appropriate tribes, and other concerned parties throughout the project. STB, ICF International, ENTRIX, Inc., SRB&A, and the SHPO met on March 5, 2008 to discuss a methodology for assessing effects to cultural resources caused by the proposed project. This cultural resources work plan is a result of that meeting.

C.3.4 Existing Knowledge

There are more than 100 recorded cultural resource sites in the project area based on a preliminary review of the Alaska Heritage Resources Survey (AHRs) maintained by the ADNR, OHA (ADNR, OHA not dated). Cultural resource sites include archaeological, ethnographic, and historic sites. The project area was traditionally used by the Dena'ina, and a portion of the area is where the greatest density of Dena'ina population lived during the prehistoric and historic periods. Therefore, this is an area that is likely to encompass numerous Dena'ina cultural resource sites including villages, hunting and fishing camps, traditional locations where raw materials and subsistence resources were collected, sacred areas, and burial locations. In addition to Dena'ina uses, non-Native people used the area historically for fur farming, agriculture, homesteading, dog mushing, and recreation. One notable historic resource that would be affected by the proposed project is the Iditarod National Historic Trail, which was designated a National Historic Trail by the U.S. Congress in 1978.

There have been few cultural resource surveys conducted in the vicinity of the project area. In order to conduct a preliminary assessment of impacts to cultural resources from this project, the MSB Cultural Resources Office developed a model to predict areas of high probability for archaeological sites within the project area. Probability was based on the attributes and context of recorded sites (e.g., terrain, topography, distance to water). The probability model did not include post-twentieth century historical data on the built environment (HDR Alaska, Inc. and TNH-Hanson, LLC 2008).

C.4. Methods Proposed for Assessing Effects to Cultural Resources under NEPA and Section 106

Several types of cultural resources could be affected by the proposed Port MacKenzie Rail Extension including archaeological resources, historic structural resources, ethnographic resources, and cultural landscapes. Archaeological resources are prehistoric Native American cultural resources and historic archaeological resources of Native American and Euro-American origins. Archaeological resources that have been found, or can be expected to occur are diverse and include villages, fishing sites and weirs, hunting and gathering sites (e.g., camps, processing sites, lookouts, kill sites), collapsed log cabins, trails, horticulture sites, evidence of culturally modified trees (CMT), buried sites, major/multicomponent sites, and cemeteries or burials. Historic structural resources are standing structures that possess historic qualities, either for the people who occupied them or for the quality and integrity of workmanship. If the building has collapsed or is otherwise open to the elements, it falls into the archaeological resources category. Historic structural resources that may be found in the project area include homesteading cabins and related buildings, recreational cabins, and agricultural buildings. Ethnographic resources are tangible and intangible elements of the environment associated with cultural traditions, such as special places in the natural world, structures or sites with cultural associations, naturally occurring materials, and subsistence activities. Examples of ethnographic resources that may occur in the project area include traditional fishing and/or hunting locations, locations traditionally used for gathering materials used in utilitarian and craft items, locations associated with oral traditions, and traditionally used trails. Ethnographic resources also include traditional cultural properties. A traditional cultural property is eligible for inclusion in the NRHP because of its association with cultural practices or beliefs of a living community that are (1) rooted in that community's history, and (2) important in maintaining the continuing cultural identity of the community (Parker and King 1998). The cultural landscape is an extension of the ethnographic resource. Cultural landscapes are a geographic area, including both natural and cultural resources, associated with historic events, activities, and/or people. Landscapes are "intertwined patterns of things both natural and constructed", and are a "reflection of human adaptation and use of natural resources which are often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built" (NPS 1997). At the broadest scale, the ethnographic resource encompasses entire landscapes. During the March 5, 2008 meeting, the SHPO recommended that the assessment of cultural resources for the Port MacKenzie Rail Extension include an analysis of potential cultural landscapes for agriculture, dog mushing, and recreation in addition to the Dena'ina cultural landscape.

SRB&A proposes that the Section 106 and NEPA EIS processes for the proposed undertaking be integrated and conducted concurrently, as recommended in 36 CFR 800.8, so that information on potential impacts to cultural resources can be evaluated as part of the EIS. The following describes the proposed methodology for assessing impacts to cultural resources from the Port MacKenzie Rail Extension including methods to be used during the EIS preparation and the completion of Section 106 responsibilities.

C.5. NEPA Assessment of Potential Impacts

The NEPA review will begin with a literature review and background research, including review of the AHRS maintained by ADNR, OHA (not dated); the NRHP maintained by NPS (not dated); existing archaeological, historic, and ethnographic literature for the project area; and reports regarding previous surveys in the project area. The section of the EIS that discusses the affected environment for cultural resources will include a description of known archaeological, historic, and ethnographic resources as well as cultural landscapes in the project area. In addition, the affected environment coverage will include a discussion of cultural resources likely to be found in the project area based on the probability model, as well as cultural resources found during Summer 2008 ground truthing surveys. The probability method and ground truthing survey are described below.

For the purposes of comparing potential impacts to cultural resources in the EIS, all known cultural resources within the project area will be considered potentially eligible for the NRHP unless previously determined otherwise. As described above, an adverse effect to cultural resources would be found when an undertaking would alter, directly or indirectly, any of the characteristics of that resource that would qualify the property for inclusion in the NRHP such as the resource's integrity (location, design, setting, materials, workmanship, feeling, association) and/or its association under Criteria A-D. The cultural resources environmental consequences chapter in the EIS will include an assessment of direct and indirect affects to known cultural resources for each proposed project alternative. The environmental consequences chapter will also include a comparison of effects on cultural resources by alternative based on probability modeling, including ground truthing field work, described below.

The EIS will also include cumulative effects to cultural resources (known and planned) from the proposed action and mitigation measures for addressing adverse effects to cultural resources from the proposed project.

C.5.1 Probability Methodology

A probability method for predicting the presence or absence of cultural resources was recently developed for the project area by the MSB Cultural Resources Division Planning and Land Use Department (HDR Alaska, Inc. and TNH-Hanson, LLC 2008). This probability methodology – or predictive modeling – can be used to guide where focused cultural resource investigations should be conducted prior to ground disturbing activity. In addition, predictive modeling can be used to compare effects to cultural resources from proposed alternatives during the NEPA process. For the Port MacKenzie Rail Extension Project, SRB&A will tier off of the MSB

probability model. The current model focuses on the probability of prehistoric archaeological sites, but SRB&A will revise the model to add the probability for encountering historic sites. The MSB Cultural Resources office recommended field surveys prior to construction for areas identified as high probability for containing archaeological sites and included emphasis on the following features:

- confluence of a river with a lake,
- confluence of two rivers,
- bluffs above major waterways,
- promontories that may have provided good lookouts for prehistoric camps,
- promontories near or adjacent to swamps where waterfowl might have congregated, and
- bluffs surrounding inland lakes and streams (HDR Alaska, Inc. and TNH-Hanson, LLC 2008).

SRB&A suggests four levels of probability based on archaeological, ethnographic and historic information; known cultural resource site location information; topographic feature distributions; and other resource distribution data. These four levels of probability include:

1. **Known Site Location:** Includes a small area around identified sites, features, or artifact finds. Activities represented by sites/features/artifacts are rarely confined to the physical limits of a feature.
2. **High Probability:** Indicated by proximity to where clear water streams enter silty rivers, high ground near an important resource, proximity to travelways (trails/streams), high prominences above surrounding terrain usable as lookouts for game, bluffs above major waterways as well as lakes and streams, inlets or outlets of lakes, confluences of two rivers/streams or a river/stream with a lake, proximity to Euroamerican settlements, and areas where remains have been reported but have not been confirmed.
3. **Medium Probability:** Includes areas with some prospect of finding cultural resources but less likelihood than high probability areas such as along high river banks, dry land with no topographic prominence relative to the surrounding terrain, topographic prominences away from the rivers, and high dry banks along the shores of lakes.
4. **Low Probability:** Includes swampy areas, intertidal marshes, very recent geological features such as active river floodplain or islands, areas with steep inclines, areas where previous ground surface and subsurface has been destroyed or heavily disturbed and/or culture bearing soils have been removed, dry lake or stream beds, bare bedrock outcrops, areas previously surveyed with negative results, areas known to have no historic significance, and areas determined not suitable for occupation or where there is a low potential for site preservation.

SRB&A will create a Geographic Information Systems (GIS) probability model for the proposed project area based on archaeological, ethnographic and historic information; known cultural resource sites; the MSB probability model; topography; and hydrography. This GIS probability model will help to refine the four probability levels described above and will be used to create a map that will be used to choose possible survey locations for the ground truthing survey. The

GIS probability model will only evaluate areas within one mile of proposed project alternatives. The study area will be divided into 100-meter squares and scored based on the following criteria:

- within 500 feet of an AHRS or other cultural resource site (+1)
- designated as a high probability area for cultural resources by MSB (+1)
- within one mile of the coast (+1)
- within one-quarter mile of a river, stream, or lake (+1)
- a surficial geology type of any of the following (+1):
 - moraines and other unsorted glacial drift
 - proglacial lake and associated fluvial deposit
 - sand dune and other eolian deposit
- previous survey data by section:
 - positive survey (+1)
 - negative survey (-1)
 - no survey (0)

Based on the above scoring method used in the GIS probability model, which was informed by the four probability levels described above, each 100-meter square could receive a maximum score of six. If the 100-meter square's end score was a four through six, SRB&A would designate it as high probability. If the 100-meter square's end score was a two or three, SRB&A would designate it as medium probability. If the 100-meter square's end score was a one, SRB&A would designate it as low probability. If the 100-meter square's end score was a zero or negative one, SRB&A would remove it from further consideration. SRB&A will use the results of the probability method to create a map that will be used to choose possible locations for the ground truthing survey and to assess the various route alternatives.

C.5.2 Ground Truthing Survey

Based on the probability method described above, SRB&A would conduct ground truthing surveys in the project area. A sample of each proposed alternative would be surveyed, with survey efforts concentrated in areas determined to be high or medium probability for cultural resources. Ground truthing would include a pedestrian survey along transects determined by ground conditions, as well as the excavation of test units in high and/or medium probability areas. To the extent possible, the cultural resources ground truthing survey will be coordinated with other field studies conducted for the EIS during Summer 2008. Following completion of the ground truthing field effort, a report describing the probability method, ground truthing survey methods and results will be submitted to SHPO. The SHPO will have a minimum of 30 days to review and respond to this report. The ground truthing survey will help to further refine the probability method that will be used for the Section 106 assessment.

C.6. Completion of the Section 106 Process

Following completion of the EIS process and STB's choice of an alternative for construction, the Section 106 assessment of cultural resources will be completed. The completion of Section 106 responsibilities is expected to be guided by a programmatic agreement (PA) developed for the

Port MacKenzie project, with all fieldwork, reporting, and approvals obtained prior to construction. This phase of analysis will tier off of the data collected for the EIS, which included a review of the AHRS maintained by ADNOR, OHA; the NRHP maintained by NPS; existing archaeological, historic, and ethnographic literature for the project area; and reports regarding previous surveys in the project area, and included the application and ground truthing of the probability method for the route alternatives. This phase of the work will include consultation with SHPO, appropriate Native organizations, user groups (e.g., dog mushers, farmers, snow machiners, recreationists, etc.) and other knowledgeable parties (e.g., the Matanuska-Susitna Borough, Bureau of Land Management, Alaska Division of Parks and Outdoor Recreation, etc.) regarding cultural resources and cultural landscapes in the project area for the alternative chosen for construction at the close of the NEPA process.

This phase of analysis will include a pedestrian survey and subsurface testing of the APE for the selected (preferred) route alternative prior to any ground disturbing activities, whereas only a sample of each proposed alternative would be surveyed as part of ground truthing during the NEPA process. These survey efforts will be concentrated in areas not surveyed during the ground truthing surveys that are determined to be high or medium probability for cultural resources. If any significant cultural resource is identified, a determination of eligibility for the NRHP will be completed and submitted as part of the final report. The final report will include a description of the project, APE, and environment in the project area. The report will also include a description, based on a review of available literature, AHRS and NRHP, of known cultural resources and previous cultural investigations in the project area; a description of the prehistory, ethnography, and history of the project area; a description of cultural landscapes in the project area; a description of consultation methods and results; a description of field survey methods and results; determinations of eligibility for cultural resources that will be affected by the proposed project; completed AHRS forms for any cultural resources identified during the field survey; and recommendations based on the results of the archival and literature review, cultural resource compliance surveys and consultation. This report will be submitted to STB who will submit it to SHPO for their review and concurrence. The SHPO will have a minimum of 30 days to review and respond to this report. Ground disturbing activities may not start until SHPO has completed its review and concurred with STB's findings regarding the proposed project's effect on historic properties.

C.7. Summary and Recommendations

Cultural resource assessments associated with the proposed Port MacKenzie Rail Extension project, a federal undertaking, would involve an integrated process for satisfying NEPA and Section 106. The NEPA documentation would include a description of the affected environment, based on predictive modeling, with a description of direct, indirect, and cumulative effects from the proposed project on cultural resources. This level of analysis would provide an effective means for comparing the potential impacts of different project alternatives and provide mitigation strategies for addressing adverse impacts to cultural resources from the proposed project. As part of the NEPA process, a ground truthing survey will be conducted in Summer 2008. The ground truthing survey will focus on a sample of areas with high and/or medium potential for cultural resources for all proposed project alternatives. A report describing the probability method, ground truthing survey method and survey results will be submitted to

SHPO following completion of the surveys. The results will be the basis for the EIS chapters on affected environment and environmental consequences. The subsequent completion of the Section 106 assessment will include a review of available information regarding cultural resources, consultation, field surveys with subsurface testing in areas not surveyed during ground truthing, and determinations of eligibility for the NRHP for any cultural resource that could be affected by the proposed project. This report will be submitted to SHPO for their review and concurrence prior to the start of any project construction.

SRB&A recommends that Native organizations be invited to participate in the ground truthing and Section 106 surveys and be allowed to review documents regarding cultural resources prior to submittal to STB. SRB&A recommends that STB, in cooperation with SHPO, create a Draft Programmatic Agreement to outline methods to assess impacts to cultural resources from the proposed project. This Draft Programmatic Agreement would be included in the EIS. Because all proposed alternatives would likely affect the Iditarod National Historic Trail, SRB&A also recommends that STB, in cooperation with SHPO and BLM, compose a Memorandum of Agreement to outline mitigation strategies for impacts to the Iditarod National Historic Trail from the proposed project.

EXHIBIT 3
CULTURAL RESOURCES SURVEY
REPORT, 2008

Port MacKenzie Rail Extension Project Report of 2008 Cultural Resources Fieldwork

Prepared for

Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423
202-245-0245

and

ICF International
9300 Lee Highway
Fairfax, Virginia 22031
703-934-3603

July 24, 2009

(Updated April 2010)

This document contains sensitive and confidential site information; it is not intended for public distribution and should not be placed in open circulation

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NOTE: The enclosure to this letter contains sensitive site-location data and this information can only be disclosed to the public with written approval from the Alaska State Historic Preservation Office.

EXHIBIT 4
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REPORT, 2009

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EXHIBIT 5
DRAFT EIS, APPENDIX I

APPENDIX I

CULTURAL RESOURCES

I. CULTURAL RESOURCES

This appendix supports the analysis of impacts to cultural resources reported in Chapter 6 of the Port MacKenzie Rail Extension Environmental Impact Statement. Table I-1 lists Dena'ina place names in the proposed rail extension study area, and provides English translations of those place names and a brief description of the sites. This table is reproduced from Kari and Fall (2003), and Dena'ina place names are given and punctuated using the Dena'ina alphabet. Table I-2 lists prehistoric cultural resources sites, and Table I-3 lists historic cultural resources sites.

Table I-1
Dena'ina Place Names in the Study Area^a (page 1 of 5)

Dena'ina Place Name #	Dena'ina Name	English Translation	Site Description
2.13	Q'ebengga Betnu	Creek of Little Lake on the Flat	Swamp and small stream into the Susitna [River]
2.14	Q'ebengga	Little Lake on (Flat)	Lake 1 mile south of Susitna Station
2.24	Q'eghtsigga	Little Slough	Island 1 mile south of Susitna Station
2.32	Qalnigi T'el'ihntnu	Rocks Are Gathered-Creek	Slough on east bank above Susitna Station
2.33	Ken Tiditunt	Where trail comes to the Flat	Swamp northeast of Susitna Station
2.42	Ken Tidituntnu	Trail comes up to the Flat-stream	Creek through swamp northeast of Susitna Station
3.1	Ggisgaht'intnu	Iron Pyrite Creek	Lower Fish Creek, southernmost outlet of Flat Horn Lake, locally "Cheechako Gold Creek"
3.2	Bek'dilyashi Betnu	Creek of Things Are Carried to It	Outlet of Flat Horn Lake, north of lower Fish Creek
3.3	Bek'dilyashi Bena	Lake of Things Are Carried to It	Flat Horn Lake
3.4	Shq'ach'egh Kena	Shortcut Flat	Large flat between Flat Horn Lake and Susitna Station
3.5	Gega Bena Betnu	Berry Lake Creek	Stream into north end of Flat Horn Lake
3.6	Gega Bena	Berry Lake	Lake 2 miles east of Susitna Station
3.7	Nqadink'et'i	Foot Path Extends	Low ridge from Flat Horn Lake to Cow Lake and to Susitna Station
3.8	K'ta'atnu	Soup Creek	Creek into northeast end of Flat Horn Lake
3.9	K'ta'atnu Tl'u	Soup Creek Headwaters	Upper Soup Creek
3.10	Nuk'dalyut	Where a Bridge Extends Across	Bridge across upper Soup Creek
3.11	Tantun Betnu, Tantuntnu	Creek of Enclosed Object [bag] Is Set in Water	Middle Fish Creek, from Flat Horn Lake to Red Shirt Lake
3.12	K'enuq' Q'estsiq'	Mineral Lick Outlet	Creek (or former creek) into Fish Creek from 'Mineral Lick Lake' or Out Lake
3.13	K'enuq' Bena	Mineral Lick Lake	Two lakes 3 miles west of Red Shirt Lake outlet, now known as Out Lake

Table I-1
Dena'ina Place Names in the Study Area^a (page 2 of 5)

Dena'ina Place Name #	Dena'ina Name	English Translation	Site Description
3.14	K'enuq' Qiy'unt	Where There Is a Mineral Lick	Campsite by Out Lake
3.15	Tl'eghesh Bena Q'estsiq'	Leech Lake Outlet	Cow Lake outlet stream
3.16	Tl'eghes Bena	Leech Lake	Cow Lake
3.17	Tl'eghesh Bena Bidituni	That Which Is Connected to Leech Lake	Small lake southeast of Cow Lake
3.18	Tantunt	Where Enclosed Object [bag] Is Set in Water	Red Shirt Lake outlet village site
3.19	Tantunt Bena	Enclosed Object [bag] Is Set in Water	Red Shirt Lake
3.20	Beq'estsiq' Tuyu'uli	Object Floating at the Outlet	Island at Red Shirt Lake outlet
3.21	Tantun Tesha	Hill of Enclosed Object [bag] Is Set in Water	Ridge on west shore of Red Shirt Lake
3.22	Dach'qelqih	Where We Spend the Spring	Site where Lynx Creek enters Red Shirt Lake
3.23	Nich'ghilentu	Creek That Flows Swiftly	Lynx Creek
3.24	Nich'ghilen Bena	Lake of Creek That Flows Swiftly	Lynx Lake
3.25	Tantun Dinlent	Where It Flows into Enclosed Object [bag] Is Set in Water	Site at north end of Red Shirt Lake where upper Fish Creek enters lake
3.26	Tudli Benach' Titaytuntu	Creek on Trail to Cold Water Lake	Upper Fish Creek, above Red Shirt Lake
3.27	Bek'dilyashi Dinlent	Where it Flows into Things Are Carried to It	Stream into Flat Horn Lake from northeast
3.28	Tantun Kaq'	Mouth of Enclosed Object [bag] Is Set in Water	Mouth of Fish Creek, on Flat Horn Lake
3.29	Nqadink'et'i Betnu	Foot Path Extends	Stream into lower Fish Creek
3.30	Tl'eghes Bena Q'estsiq' Hq'adghilent	Where Leech Lake Outlet Current Flows Down	Site where Cow Lake outlet stream meets Fish Creek
3.31	Hchil' Nughik'at'	Weir Fence is Stretched Down	Weir site at Tantunt
3.32	xiq'a Hq'atneft	Where Salmon Are Poured	Fish-holding pit on the bank at Tantunt
3.33	Nik'uleht	Place that Fish Swim to	A sockeye spawning location along a gravel beach on upper Red Shirt Lake, possibly bay on northwest end of lake
8.2	Ch'atanaltsegh	Yellow Water Flows Out	Creek into Susitna River on east side 2 miles above the mouth of the Yentna, locally called "Shem Pete Slough"
8.6	Tutikaq'tnu	Creek of Descending Water Mouth	Rolly Creek
8.7	Tutikaq' Bena	Lake of Descending Water Mouth	North Rolly Lake
8.35	Niqaghelet	Where Current Is Swirling	Bluff and eddy on the Susitna River, 1 mile above Dashq'e, on the east bank

Table I-1
Dena'ina Place Names in the Study Area^a (page 3 of 5)

Dena'ina Place Name #	Dena'ina Name	English Translation	Site Description
12.1	Tsaltastnu Kaq'	-?- River Mouth	Dena'ina women used to snare geese here
12.2	Tsaltastnu	-?- Stream	The Little Susitna River; fishing/trapping area used by people who lived at Red Shirt Lake
12.3	(no recorded name)		Maguire Creek; trail to Flat Horn Lake along this creek
12.4	Dusgeda Tukda Ti'iltant	Where Father of Dusgeda Was Carried Out	Shern Pete reports there was once a village here (Kari and Fall, 2003). The name refers to Chief Dusgeda Tukda dying here and being carried out of the bathhouse.
12.5	Sheshnena	Saving Land, "Rescue Land", "Lucky Land"	Low ridge extending from Cow Lake south to the Little Susitna River. Area used to gather canoe birchbark.
12.6	Unqeghnit Skitnu Bena	Upstream Brushy Stream Lake	Butterfly Lake. Tent camp area used for beaver hunting.
12.7	Delindin Bena	Derenty's Lake	Delyndia Lake
12.8	Utiditin	Trail Goes to It	Swamp between the Little Susitna River and Nancy Lake
12.9	Tudli Betnu	Cold Water Creek	Lake Creek; house pits are reported on the right bank (Reger, 1983 ^b).
12.12	Tudli Bena	Cold Water Lake	Nancy Lake
12.13	K'itudaghi'ut	Where Water Extends in (to Land)	Indian Bay, "Indian Cove," middle bay on the east side of Nancy Lake. Village used for hunting, fishing and putting up fish.
12.23	Skitnu	Brushy Stream	Skeetna Lake outlet stream
12.24	Skitnu Bena, Unqeghdut Skitnu Bena	Upstream Brushy Stream Lake	Skeetna Lake
13.1	K'enaka Nen	-?- Land	Knik-Big Lake area
13.3	Dilhi Tunch'del'usht Beydegh	Point Where We Transport Hooligans	Fish camp/hooligan harvest site at Point MacKenzie
13.6	K'teleh Bena	Fish Run Lake	Lost Lake
13.7	Hnihighil'iy	Tooth that is embedded	Hill on south side of Goose Bay
13.9	Tustl'aghtnu	Rear Portage Creek	South fork of Goose Creek; set of trails and portages from Goose Bay north to Red Shirt Lake, passing Sevenmile Lake, Big Lake, Papoose Twin Lake, and the Little Susitna River
13.10	Łeyestnu	Dwarf Birch Creek	Goose Creek
13.11	Biłni Dnaghelggey Bena	White Water Lake	Sevenmile Lake
13.12	Łeyes Bena	Dwarf Birch Lake	Stephan Lake - may have been nichil [multi-family dwelling] there

Table I-1
Dena'ina Place Names in the Study Area^a (page 4 of 5)

Dena'ina Place Name #	Dena'ina Name	English Translation	Site Description
13.13	Elnen Ghilget	Rotten Ground	Swamp on Goose Bay side of Mosquito Point
13.14	Ts'es l'unt	Where There Is a Rock	A village at Mosquito Point between Fish Creek and Goose Bay when the army "took over".
13.15	K'enakatnu, C'enacetna'	-?- River	Major village site on a low terrace on the north bank of Fish Creek, approximately 0.1 mile above the mouth
13.16	K'eyghashtnu	Fish Harvest Creek	Channel in Knik Arm tide flat paralleling the bank between mouth of Fish Creek past Soldiers Creek to Knik Lake outlet
13.17	Nitq'adaydeni Betnu	Joining Streams Creek	Threemile Creek
13.18	K'enaka Bena	-?- Lake	Trail from Big Lake to Susitna Station (nichil at outlet) and to Red Shirt Lake
13.19	Nuqiltin Betnu	They Found a Place Creek	Outlet stream of West Papoose Twin Lake and stream from Hourglass Lake in the Little Susitna Drainage
13.20	Nuqiltin Bena	They Found a Place Lake	West Papoose Twin Lake; reported trail and nichil
13.21	Tutik'eltuni Betnu	Creek of ponds extend down	Lucile Creek; location for fish traps for trout and salmon
13.22	Tuniich'eli Bena	Clear Water Lake	Clear or Wallace lakes
13.23	Hey Gega Bena	Lowbush Cranberry Lake	Jacobsen Lake, west of Lake Lucile
13.24	Benkda	No-Good Lake	Lake Lucile; fishing location and trail
13.25	Hnits'uk'nilut, Hnits'uk'nilut Bena	Where Dishes Are Embedded, "Where Dishes Are Embedded Lake"	Caves Lake
13.26	Tuq'ets'ghet	By Spring Water	Susitna people used to live at this site located 1 mile below Knik (Kari and Fall, 2003)
13.27	Ch'ak'nileght	Where fish swim out	Mouth of Soldiers Creek, 2 miles south of Knik
13.28	Ggih Qughijaq Bena	Lake Where a Monster Came Up	White Lake
13.29	Nughay Bena	Frog Lake	Knik Lake, Knik townsite, "New Knik"
13.30	Kidaghi'i, Niiqidaghel'uyi	The Ones That Are Connected Together	First overflow marsh below Knik Lake - fishing place with nichil
13.31	Bekidaghi'i'uyi Gga	Little One That Is Connected to the End	Second lower salt marsh to the east of Knik Lake
13.46	K'telehtnu	Fish Run Stream	Mule Creek

Table I-1
Dena'ina Place Names in the Study Area^a (page 5 of 5)

Dena'ina Place Name #	Dena'ina Name	English Translation	Site Description
13.47	K'enakatnu Kaq'	-?- River-Mouth	Mouth of Fish Creek
13.48	Nitq'adaydeni Bena	Joining Streams Lake	Hunting and berry-picking trail between Threemile and Sevenmile lakes (approximately 0.1 mile from Knik).
13.49	Nuqendugghesh	Lightning Strikes	Hill off Meadow Creek near the Theodore homestead
13.50	Ch'ak'nileghtnu	Fish Swim Out-Stream	Soldiers Creek, White Lake outlet Stream, 2 miles south of Knik

^a Reproduced from Kari and Fall (2003); Dena'ina place names are punctuated according to the Dena'ina alphabet

^b Not a primary reference in this appendix; Kari and Fall (2003) referenced this source, and SEA has retained it here to maintain continuity of the information.

Table I-2
Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension Project Area^a (page 1 of 11)

AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
ANC-00119	Previously documented	Lake Creek #1 (Tudli Bena)	Fifteen depressions in two areas. Eight are on a spruce-covered rise, 2 to 3 meters high adjacent to the lake. These are squared to rounded and range from 2 meters square to 3.7 meters in diameter, with depths to about 1.2 meters below surface. Seven are along the lower areas of the rise on the west side of the creek. All of these depressions are about 1 meter in diameter. Wood frame buildings of recent construction or under construction are present on the rise adjacent to the larger depressions. Minor disturbance of some of the pits was noted. According to Fall, Shem Pete recalled hearing about "a big nichil" [winter house] and fish traps at this location.	Prehistoric	NDE
ANC-00245	Previously documented	Lake Creek #2	Several cache pits were noted here on the terrace above the creek mouth. Testing did not reveal any subsurface remains.	Prehistoric	NDE
ANC-00608	Previously documented	Fish Creek Bend Site 4	The site consists of a cluster of six circular depressions that vary in size from 0.4 meter to 1.3 meters in diameter and 0.15 meter to 0.42 meter in depth. These depressions are approximately 0.1 meter to 0.6 meter apart at the base of a long, narrow ridge that parallels the east bank of Fish Creek.	Prehistoric	NDE

Table I-2
Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
Project Area^a (page 2 of 11)

AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
ANC-00614	Previously documented	Threemile Creek Confluence North 2	This site consists of approximately 25 small, circular depressions, measuring 0.8 to 1.5 meters in diameter, and three larger pits, measuring 1.5 to 2 meters in diameter and 0.4 to 0.5 meter deep, on two terraces paralleling Fish Creek and covering an area of approximately 30 meters. This area also appears to be a small camping spot and canoe landing site.	Prehistoric	NDE
ANC-00615	Previously documented	Threemile Creek Confluence North 3	The site consists of three possible structural depressions. The largest measures 8 by 10 meters and the two smaller ones measure 8 by 8 meters. The depressions appear to have similar orientations, but their outlines are very vague.	Prehistoric	NDE
ANC-00616	Previously documented	Threemile Creek Confluence North 1	This site consists of a 3-by-2-meter depression near the confluence of Threemile Creek with Fish Creek (near the Iditarod Trail).	Prehistoric	NDE
ANC-00619	Previously documented	Fish Creek Tributary Site	This site consists of approximately 30 small circular depressions on the west bank of Fish Creek, across from the confluence of an unnamed stream. The site area covers <1 acre on a slight terrace adjacent to Fish Creek. Dimensions of the depressions are unknown due to heavy snowfall at the time of the survey.	Prehistoric	NDE
ANC-00620	Previously documented	Liten Lake Area Site	This site consists of five separate groups of depressions on a promontory jutting into the Fish Creek-Threemile Creek swamp. Some pits are multi-cellular; one cluster consists of a linear series of six (1.5-by-2-meters square) pits. Thirty-four pits were discovered over the entire area, 19 of them measuring 1 to 2.5 meters in size. The remainder are small and circular with a diameter of less than 1 meter.	Prehistoric	NDE
ANC-00621	Previously documented	Victor Homesite Depressions	This site consists of a linear series of approximately four depressions extending for an estimated 12.6 meters along a northeast-trending ridge overlooking a small tributary of Fish Creek. Dimensions were estimated due to heavy snowfall at the time of the survey.	Prehistoric	NDE

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Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
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AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
ANC-00624	Previously documented	Fish Creek Bend 1 Site	This site consists of a series of five depressions ranging in size from 0.55 by 0.6 meter to 1.49 by 3.34 meters, covering a 10-square-meter area. Seismic lines run along the southeast and northwest sides of the site.	Prehistoric	NDE
ANC-00625	Previously documented	Fish Creek Bend 2 Site	This site consists of a total of eight depressions in three clusters. Two of the clusters have two large pits; the third is a series of four pits in a T-shaped configuration. These depressions range in size from 1 by 1 meter to 2 by 2.5 meters.	Prehistoric	NDE
ANC-02870	Previously documented	Nancy Lake Caches	The site [has] three cache pits, numerous culturally modified trees (blazed, bark stripped, one twisted).	Prehistoric	NDE
ANC-02988	Yes		One surface depression (2.4 by 1.8 by 0.6 meters) on a southwest slope nestled in a thicket of baneberries. The bench above is very rumpled with several untested cache-like features.	Prehistoric	NDE
ANC-02989	Yes		One surface depression (2.4 by 1.4 by 0.5 meters) in the bottom of a swale. The pit has straight sides that are thickly moss-covered. Though about 70 meters from ANC-02988, they are likely associated.	Prehistoric	NDE
ANC-02992	Yes		One surface depression (1.5 by 2.5 by 0.25 meters) along a ridgeline with high grass in mature deciduous hardwood forest on well-drained upland. Excellent hunting area overlooking wetlands down steep slope to east and easier slope to west. Numerous trails cross open forest.	Prehistoric	NDE
ANC-02993	Yes		This site consists of four surface depressions. Two adjacent depressions, possibly cache pits, have dimensions of 2.0 by 1.9 by 0.8 meters and 1.9 by 1.9 by 0.6 meters. The other two surface depressions (2.0 by 2.0 by 0.8 meters) are on a ridge/draw complex overlooking a low wet black spruce bog with mossy floor to the east and north.	Prehistoric	NDE

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Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
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AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
ANC-02994	Yes	PMREP	Cluster of three house depressions (3.5 by 3.2 by 0.5 meters, 3.0 by 2.8 by 0.7 meters, and 3.0 by 3.0 by 0.5 meters) with at least 65 smaller surface depressions (likely cache pits) nearby. Both rectangular houses have Arctic entries, with one opening to the northeast and the other to the southeast. The one to the northeast has what appears to be a cooking pit beside the doorway. A fourth smaller house depression (2.5 by 1.8 by 0.4 meters) is set 30 meters away. One house depression is filled with alder and has mossy ground cover; the others are in grassy areas. There are four distinct riffles (elevation drops) in the creek frontage that could be fish weir remains. Several large boulders in the stream next to some riffles might have been part of a weir or trap system. The water is approximately 1 foot deep in general, with areas of deeper channel scour and bank undercutting on the opposite side from the site. There is a series of four adjacent cache pits each about 1.0 meter in diameter and all less than 0.6 meter deep along the trail on the first terrace by the creek. About 50 meters southeast of these there are two more adjacent cache pits (each 0.5 by 0.5 by 0.7 meters). One of these contains the remains of a wood post and other structural materials. There are at least two tree blazes along the creek, and several culturally modified trees in the vicinity, including stumps of trees cut with an axe, adze, or hand saw. There is a cubby-style snare set at the northwestern extent of the site on the flat, but this is likely modern. The entire site stretches along Fish Creek near the intersection with Three Mile Creek on a bench or floodplain, with the house-sized depressions on benches approximately 10 feet higher than the floodplain. The area is covered in mixed deciduous and white spruce hardwood forest of a mature character with many tree falls. Farther east there is higher-density black spruce bog adjacent to the streams.	Prehistoric	NDE

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Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
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AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
ANC-02995	Yes		Rectangular surface depression (3.0 by 3.0 by 1.5 meters), likely a house feature, on a southeast bench of hill X78, south of Bolo Lake, overlooking a 2-meter-tall bluff face leading down to a wetland area with a stream feeding easterly and likely into the Fish Creek watershed. Site overlooks a wide open space that is typical of successful moose hunting areas. The depression is situated in the burnt-out remains of a forest fire in what was mixed deciduous and white spruce forest. There is an animal den in the corner of the pit. No cache pits were identified nearby; however, the area is difficult to see due to the number of fallen burnt trees.	Prehistoric	NDE
ANC-02996	Yes		A surface depression (3.0 by 5.0 by 0.75 meters), likely a house feature, with several smaller depressions, possibly cache pits, were located at the base of the floodplain of Little Meadow Creek in a patch of mature spruce trees. On top of the river bank the trees have all been knocked down, probably by forest fires. Cache pits are 1.0 by 2.0 by 0.5 meters arranged in a line along the bank, with the house feature cut slightly into the bank with a tall berm on the floodplain side.	Prehistoric	NDE
ANC-02997	Yes		This site consists of five small surface depressions on uplands above Little Meadow Creek. Each depression is about 2 meters squared in a line along the contour line of a slight ridge. These are likely cache pits for salmon from Little Meadow Creek. The pits are near a power line corridor and a 1915 General Land Office brass cap marker.	Prehistoric	NDE
TYO-00014	Previously documented	TYO-00014	About 10 to 15 cache pits, and one possible house pit, are reportedly located on a small hill on the south side of Willow Creek.	Prehistoric	NDE
TYO-00035	Previously documented	Horseshoe Lake Caches	Five cache pits, measuring 1.5 meters in diameter and 1 meter deep, were located on a terrace about 3 meters above the level of the lake.	Prehistoric	NDE

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Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
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AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
TYO-00041	Previously documented	TYO-00041	Reger and Dixon ^e reported two double-celled depressions (each pit measuring 2.5 by 3.0 meters), three 1.5-meter diameter depressions (arranged in a row, each about 2 meters apart), and five depressions (about 1 meter in diameter and clustered within a 5-meter-by-4-meter area, with a faint outline of a rectangular depression attached to one side) on the edge of a terrace overlooking a former lake or river bed. All depressions, except the rectangular outline, were about 70 centimeters deep.	Prehistoric	NDE
TYO-00060	Previously documented	TYO-00060	Yarborough ^g noted one small and two large cache pits on a point of land approximately 1.5 kilometers southeast of the confluence of Willow Creek with Susitna River. The features measure 0.9 by 1.4 meters and 0.4 meter deep, 3.4 by 2.9 meters and 0.85 meter deep, and 2.65 by 2.6 meters and 0.6 meter deep. Two tests were made. Southeast of these, Lee and Seager-Boss ^e reported finding 10 additional depressions in four locations. The depressions range from 1 meter square to 3 to 4 meters square.	Prehistoric	NDE
TYO-00067	Previously documented	TYO-00067	A deep rectangular feature (2.8 by 2.8 by 1 meters), probably a cache pit, on a well-drained terrace about 480 meters east of the Little Susitna River and about 140 meters south of TYO-068. A birch tree was noted growing in the adjacent backfill. A total of 17 tests placed within 10 meters of the pit failed to produce cultural material. A recent camp (consisting of a dead fire filled with fresh fish heads and skeletons and covered with branches) and a tree cache were also noted about 100 meters to the west, on the same terrace.	Prehistoric	NDE
TYO-00068	Previously documented	TYO-00068	A 2.2-by 1.7-by-1-meter feature, probably a cache pit, on a well-drained terrace about 380 meters east of the Little Susitna River and about 140 meters north of TYO-00067. A total of 16 tests placed within 10 meters of the pit failed to produce cultural material.	Prehistoric	NDE

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Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
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AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
TYO-00136	Previously documented	TYO-00136	The site consists of two caches, one with charcoal in the test. Surface and subsurface scatter of stone basalt tools (6) and flakes (12), and a massive triangular core (70 centimeters long, 45 centimeters wide, and 10 centimeters thick) was found under 14-inch diameter spruce, because the roots are bringing artifacts to the surface. There is also a blazed tree at the site.	Prehistoric	NDE
TYO-00137	Previously documented	TYO-00137	Trappers' shelter (3.3 meters by 1.9 meters by 60 centimeters with birch bark under the organics.	Prehistoric	NDE
TYO-00138	Previously documented	TYO-00138	Angular stone tools and flakes in a brown soil matrix. Artifacts coming from 30 centimeters below surface with burnt soil, discoloration, ash, and charcoal.	Prehistoric	NDE
TYO-00141	Previously documented	TYO-00141	A hunter or trapper shelter, 1.5 by 1.5 meters a 60-by-60-centimeter entry to the northwest. Depth is 20 to 40 centimeters.	Prehistoric	NDE
TYO-00142	Previously documented	Vicki Cole Using ^d			NDE
TYO-00143	Previously documented	Vicki Cole Using ^d			NDE
TYO-00144	Previously documented	Vicki Cole Using ^d			NDE
TYO-00145	Previously documented	Dan Stone Using ^d			NDE
TYO-00146	Previously documented	Dan Stone Using ^d			NDE
TYO-00163	Yes		One rectangular surface depression (2.4 by 3.0 by 0.3 meters) on a small ridge associated with the Elmendorf Moraine. No mature growth in depression might indicate it is a relatively recent feature.	Prehistoric	NDE
TYO-00165	Yes		One round surface depression (1.8 by 1.8 by 0.3 meters) on small ridge less than 0.5 mile west of Goose Creek flats. No mature growth in depression might indicate it is a relatively recent feature.	Prehistoric	NDE

Table I-2
Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
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AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
TYO-00166	Yes		One small rectangular surface depression (1.5 by 2.5 by 0.3 meters), possibly a temporary Dena'ina trail shelter, in well-drained upland, mature mixed hardwood forest area. Feature does not appear to be a root cast or other naturally caused depression. Test pit indicated no cultural deposits or stratigraphic discontinuities.	Prehistoric	NDE
TYO-00167	Yes		One surface depression (2.0 by 2.5 by 0.25 meters) in mature hardwood forest in well-drained upland soils; however, vicinity of feature is a small patch of spruces with rectangular berm and moss instead of prevalent Labrador tea forest floor groundcover. Feature is near dozer and other trails through forest and not far from a former kettle/kettle lake, 0.15 mile to the northeast. The location is possibly the former site of a small structure or cache.	Prehistoric	NDE
TYO-00168	Yes		A line of three surface depressions approximately 1-meter square in a mature, well-drained upland hardwood forest with Labrador tea and grass understory. Feature is not far from kettle depressions and bluff edge above Goose Bay flats.	Prehistoric	NDE
TYO-00169	Yes		One small surface depression, possibly a overnight shelter (<i>titenq'a</i>), on top a small knob overlooking a lake.	Prehistoric	NDE
TYO-00171	Yes		This site consists of eight 1-meter square surface depressions. This group of depressions is in a patch of alders along a ridge slope overlooking a wide area of shallower sloping mature hardwood forest. Surface depressions are on the steepest part of the hill slope. Area is noted for hosting a relatively dense population of Dena'ina people of the Sushetna division. Surface depressions are west of Cow Lake on the west side of a ridge used as a trail to nearby Red Shirt Lake.	Prehistoric	NDE
TYO-00172	Yes		One surface depression (1.0 by 1.2 by 0.3 meters).	Prehistoric	NDE

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Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
Project Area^a (page 9 of 11)

AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
TYO-00173	Yes		One surface depression (2.0 by 2.0 by 0.4 meters) with four or more smaller, 1-meter square surface depressions in the vicinity. Located in mature upland deciduous forest in well-drained area heavily covered with Devil's Club. Located on the west slope of a ridge about 0.6 mile from Cow Lake used by Dena'ina as trail connecting Red Shirt Lake to the coast.	Prehistoric	NDE
TYO-00175	Yes		A series of surface depressions at the base of a ridge to the west of Red Shirt Lake and 0.15 mile north of the Fish Creek outlet of Red Shirt Lake. There is a larger surface depression is at the top of the ridge line. The larger depression is indistinct but approximately 2.0 by 3.5 by 0.5 meters with a berm around three sides. View is excellent from the top over the lowlands below, and the small surface depressions are probably local cache pits for abundant food resources from wetlands to the west and Fish Creek to the south. Small depression in deciduous forest patch at base of bluff with mossy ground cover, while uplands consist of Devil's Club in a mature deciduous hardwood forest with tall grass.	Prehistoric	NDE
TYO-00176	Yes		Three surface depressions (1.0 by 1.0 by 0.5 meters each) and one small surface depression (1.0 by 0.5 by 0.2 meters) in mossy black spruce forest above water-saturated peat wetlands west of the Red Shirt Lake ridge and north of Fish Creek. These depressions are possibly storage or cache pits and are at 200 feet elevation.	Prehistoric	NDE
TYO-00177	Yes		One surface depression (1.0 by 1.0 by 0.5 meters).	Prehistoric	NDE
TYO-00178	Yes		One surface depression 2.0 by 3.0 by 0.25 meters) with a very shallow slope and small berm in mature upland hardwood forest along well-drained ridge complex. Near upland lakes 0.2 mile south and 0.35 mile west-southwest. A nearby open space might be a spring or seasonal wetland. There might be other depressions nearby, but these are relatively indistinct.	Prehistoric	NDE

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Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
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AHRs No.	Documented During 2008 Survey ^f	Site Name	Site Description ^b	Period (Date)	National Register of Historic Places Status ^c
TYO-00179	Yes		One surface depression (2.0 by 3.0 by 1.5 meters) surrounded by a 1-foot-high berm and its long axis oriented north-south on the west side of a ridge west of Red Shirt Lake. The depression is less than 0.1 mile from a spring indicated on the U.S. Geological Survey map in a well-drained, relatively flat area overlooking a steep drop of wetlands. There is a second, smaller (0.6 by 0.6 by 0.5 meter), surface depression nearby. Mature mixed deciduous and white spruce hardwood forest cover the immediate area. This feature might be a single-room house pit with cache pits nearby.	Prehistoric	NDE
TYO-00180	Yes		One surface depression (2.0 by 1.5 by 0.5 meters), possibly an overnight shelter (<i>titenq'a</i>), on the tip of a point into a paleolake (now a swamp). There is one Culturally Modified Tree (CMT) adjacent to it that has two blazes, one above the other, on each opposite side of the tree (four total blazes).	Prehistoric	NDE
TYO-00181	Yes		Large house depression (9.0 by 8.5 by 0.8 meters) with Arctic entry (1.1 by 1.1 meters) opening to S70°W. There is a cooking pit in the south corner and a central hearth. The house is 10 meters in from a steep 30-meter high bluff. There are no cache pits associated with this feature.	Prehistoric	NDE
TYO-00182	Yes		One rectangular surface depression (2.0 by 1.0 by 0.5 meters), possibly a cache pit.	Prehistoric	NDE
TYO-00183	Yes		One rectangular surface depression (1.0 by 0.5 by 0.5 meters), possibly a cache pit.	Prehistoric	NDE
TYO-00185	Yes		This site consists of a single house depression (3.2 by 3.0 by 1.2 meters). A test in the depression recovered a stone artifact. There is a steep south-facing nose 15 meters south. The field crew dug a number of tests around the house depression and on top of the overlook. One test pit revealed a brown chert flake at 25 centimeters below surface and a grey chert flake at 45 centimeters below surface, possible tablet core at 45 centimeters below surface, and charcoal from 16-40 centimeters below surface.	Prehistoric	NDE

Table I-2
Prehistoric Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension
Project Area^a (page 11 of 11)

AHRs No.	Documented During 2008 Survey^f	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
TYO-00187	Yes		One surface depression (4.5 by 3.5 by 1 meters) in a mature hardwood forest. Depression is located along a bluff edge on which other house pits and cache pits were discovered to the NE and SW of this feature.	Prehistoric	NDE
TYO-00188	Yes		Complex of at least 17 surface depressions. Three 2 by 2 by 1 meters, one 1 meter in diameter, two 2.0 by 2.0 by 0.5 meters, a five-cell vertical row (oriented S10°E), and a six-cell set of depressions. The six-cell is 4 meters in from the bluff edge and measures 7.5 by 6.5 meters; the cells range from 0.8 to 1.1 meters deep. Several CMTs along the bluff edge mark the site and the trail leading both to the northeast (down the bluff) and to the southwest (along the bluff edge toward the house pit at TYO-00187).	Prehistoric	NDE
TYO-00189	Yes		One surface depression (1 by 2 by 1 meters), possibly a cache pit.	Prehistoric	NDE

^a Sources : ADNR, 2008; Stephen R. Braund & Associates, 2009.
^b To convert meters to feet, multiply by 3.2808; to convert centimeters to inches, multiply by 0.3937; to convert kilometers to miles, multiply by 0.62137.
^c NDE = a determination of eligibility for inclusion on the National Register has not been made; NRE = determined to be eligible for inclusion on the National Register; NRJ = National Register nomination rejected.
^d These are archaeologists who have documented cultural resources and requested an AHRs number from the Office of History and Archaeology. However, at the time analysts requested the AHRs data for use in the proposed Port MacKenzie Rail Extension Environmental Impact Statement analysis of potential impacts to cultural resources, these archaeologists had not yet submitted their site descriptions to the Office of History and Archaeology.
^e Not a primary reference in this appendix; the Alaska Heritage Resources Survey database on file with the Alaska Department of Natural Resources references this source, and SEA has retained it here to maintain continuity of the information.
^f 2008 cultural resources survey conducted by SEA.

Table I-3
Historic Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension Project Area^a (page 1 of 6)

AHRs No.	Documented During 2008 Survey^e	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
ANC-00085	Previously documented	The Little Susitna River Railroad Bridge (The Little Susitna River)	This is a railroad bridge that consists of one 80-foot ^f through-girder fabricated by the American Bridge Company and mounted on concrete abutments in 1927. It was made of steel stringers and 70-pound rail guards. The north pier was washed out in 1943. [This is incorrectly designated ANC-063 in Brown 1975 ^d .]	Historic (AD 1927-1943)	NDE
ANC-00086	Previously documented	Houston Railroad Station	This is the site of a former railroad station that was established in 1917 near several important coal mines that were being developed. It was named after Congressman Houston of Tennessee. A spur was constructed from here to the Jandos and Athans coal mines in early 1918. [This is incorrectly designated ANC-064 in Brown 1975 ^d .]	Historic (AD 1917)	NDE
ANC-00470	Previously documented	Nancy Roadhouse	Roadhouse located southwest of Nancy railroad "station," which Smith (1974) ^d refers to as Nancy Roadhouse because of its proximity to Nancy railroad station and Nancy Lake. [Incorrectly assigned ANC-052 in Smith, M.E. 1974 ^d .]	Historic	NDE
ANC-00607	Previously documented	Fish Creek Bend Site 3	This site consists of milled, rotten, 2-inch-by-2-inch boards with round nails at the base of a large hill next to Fish Creek. The use of these boards is unknown.	Historic	NDE
ANC-00617	Previously documented	South Vance Road Site	This is a partially collapsed, rectangular log structure, measuring 10.13 by 5.69 meters, with no doors or windows (structure not completed). The walls are 12 logs high, with the base logs sitting on 12 concrete footings and having saddle-notched corners. The roof has collapsed, but there is no evidence of shingles or tarpaper. To the south of the building there is a large pile of debris that includes milled boards, pallets, lumber, and miscellaneous debris.	Historic	NDE

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Historic Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension Project Area^a (page 2 of 6)

AHRs No.	Documented During 2008 Survey^e	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
ANC-00618	Previously documented	Vance Road Site 1	This is a log structure, measuring 8.5 by 5.5 meters, with a partially collapsed roof, saddle-notched logs, and burlap chinking. The remaining walls of the structure are eight logs high (about 1.65 meters). There is a porch on the north and tongue-and-groove boards were used for the interior floor. To the east is a depression (garbage pit?) and to the west is an outhouse. To the southeast is a birch tree with ladder made of boards nailed to the tree. Miscellaneous "modern" debris is scattered around the site.	Historic	NDE
ANC-01341	Previously documented	Houston Mine	[No Site Description Available]		NDE
ANC-02777	Previously documented	(Alaska Railroad Corporation Bridge at Mile Post 180.8) Nancy Lake Overpass	Nancy Lake Overpass bridge is a 28-foot concrete ballast deck bridge consisting of one 28-foot concrete span. The bridge rests on steel pile bents with concrete caps. The bulkheads are driven steel sheet piles. This bridge has neither inner guardrails nor outer tie spacers. A fiber optic cable runs in the ballast across the bridge. The Alaska Engineering Commission built the original timber trestle bridge in 1917 from standard plans using local timber. The bridge consisted of six 14-foot spans and was originally numbered 60. The railroad rebuilt the bridge in 1935 and again in 1952 with untreated timber. A fourth stringer was added for the increased weight of diesel locomotives. Work performed since that time includes new caps (1972), new stringers, ties, and guardrails (1974), new floor (1975), new treated bulkheads (1982), and new steel tie spacers. In 2002, the Alaska Railroad Corporation replaced the timber bridge with the concrete ballast deck bridge to improve safety and reduce maintenance costs.	Historic (AD 1952)	NRJ
ANC-02990	Yes		Shooting blind with three notched log walls and metal chair on the square nose of an overlook ridge.	Historic	NDE

Table I-3
Historic Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension Project Area^a (page 3 of 6)

AHRs No.	Documented During 2008 Survey^e	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
ANC-02991	Yes		Red painted 20-by-24-foot frame house with nearby outhouse. The house is accessed by a gravel road. While the house has not been used in some time it is obviously not abandoned. Age unknown, title to the land patented in 1965.	Historic	NDE
ANC-02998	Yes		1916 Post Office route from Knik to Susitna, connects to TYO-00164. The field crew crossed this feature during the field survey and assigned the feature a Global Positioning System waypoint. This waypoint intersected a route digitized from a 1916 Post Route Map of the Territory of Alaska.	Historic, 1916	NDE
TYO-00017	Previously documented	Little Susitna Roadhouse	Roadhouse on the Iditarod Trail, approximately 14 miles out of Knik. Also known as the Halfway Roadhouse, it was operated for many years by Lee and Grace Exelson after they left the Happy River Roadhouse (TYO-023). The structure has reportedly been washed away by the river.	Historic	NDE
TYO-00026	Previously documented	Willow Creek Railroad Bridge	Railroad bridge fabricated by American Bridge Company and erected during the construction of the Alaska Railroad. Two bents, concrete abutments, one 80-foot span, deck girders, concrete caps in 1927; steel stringers. Steel construction.	Historic (AD 1927)	NDE
TYO-00027	Previously documented	Little Willow Creek Railroad Bridge	Railroad bridge fabricated by American Bridge Company and erected during the construction of the Alaska Railroad. Two bents, concrete abutments, one 80-foot span, deck girder, concrete caps in 1926; steel stringers, new ties and guard rail in 1961.	Historic (AD 1926)	NDE
TYO-00034	Previously documented	Fish Creek 2	A small area with one cache pit, which yielded one cut bone and historic ceramic fragments, was reported as an aboriginal village site on the Susitna River to Nancy Lake trail.	Historic	NDE

Table I-3
Historic Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension Project Area^a (page 4 of 6)

AHRs No.	Documented During 2008 Survey^a	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
TYO-00038	Previously documented	William Davis Homestead (Johnson Homestead, Little Willow Homestead)	This homestead, patented by Aura and R. L. Johnson as a 5-acre homestead in 1954 and a 159-acre homestead in 1956, includes a cabin built in 1914-1915 by William Davis, a trapper and milk-farm operator. This cabin is purported to be the oldest continuously used building along the railroad from Seward to Fairbanks. During construction of the Alaska Railroad, a log barn housed the railroad's horses and mules.	Historic (AD 1916)	NDE
TYO-00084	Previously documented	Knik-Rainy Pass Trail (INHT-PT)	The Knik-Rainy Pass Trail is a segment of the primary Iditarod Trail historic route. The trail in this quadrant begins 0.25 mile northeast of Jewel Lake, runs northwest crossing Susitna River, Alexander Creek, and Skwentna River, passing Shell Lake, Finger Lake and crosses Happy River. (Other trail segment is ANC-761.)	Historic (early AD 1900s)	NDE
TYO-00096	Previously documented	Alaska Railroad Mile Post 187.7 Iron Creek Bridge (Willow Creek Bridge)	The original structure, a 75-foot-long, five-span timber trestle, was built in 1917. A sixth span was added in the 1940s. The current span is 84 feet long, 10 feet wide at the ties, and about 12 feet above the creek bed. It is primarily supported by creosoted timber piles driven into the creek bed. The piles are arranged in seven rows of five piles each, perpendicular to the tracks. Each row is capped by a beam and diagonally braced on both sides, forming structural bents. The outer piles in each bent are sloped to increase lateral stability. At each end of the bridge, an abutment of horizontal timbers retains the soil adjacent to the first bent. Two composite beams, each made up of four rows of beams through-bolted together, rest on the bents and support evenly spaced ties. Plywood laid between the tracks in the 1990s provides moose running down the tracks in front of a train a better surface for crossing the bridge. In 1950, treated pilings replaced the original untreated ones, caps and braces were replaced, and a stringer added to each chord. In 1971 bridge ties and guardrail were replaced.	Historic (AD 1917-1952)	NRE

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Historic Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension Project Area^a (page 5 of 6)

AHRs No.	Documented During 2008 Survey^e	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
TYO-00164	Yes		1916 Post Office route from Knik to Susitna, connects to ANC-02998. The field crew crossed this feature during the field survey and assigned the feature a Global Positioning System waypoint. This waypoint intersected a route digitized from a 1916 Post Route Map of the Territory of Alaska.	Historic, 1916	NDE
TYO-00170	Yes		Iron Dog Trail. The field crew crossed this feature during the field survey and assigned the feature a Global Positioning System waypoint. This waypoint intersected the Iron Dog Trail that SRB&A digitized from a Parks, Refuges, and Recognized Trails Map from the Port MacKenzie Rail Extension Project Preliminary Environmental and Alternatives Report. The Iron Dog Trail is part of the Iron Dog Race and portions of the trail occur along section lines which date back to the 1960s seismic testing programs or even earlier.	Historic	NDE
TYO-00174	Yes		Log cabin on ridge west of Cow Lake along a gravel airstrip. Old land-clearing tractor is next to cabin. Cabin shows evidence of recent repair activity to roof and the age of the cabin is unknown.	Historic	NDE
TYO-00184	Yes		Almond Lake Trail. The field crew crossed this feature during the field survey and assigned the feature a Global Positioning System waypoint. This waypoint intersected an SRB&A digitized trail feature called the Almond Lake Trail (see Matanuska-Susitna Borough Forest Management Plan Phase 1 – Part 2 document for map of trail). This trail is part of the West Gateway system near Willow. According to the Willow Area Trail Plan, the earliest trails within the West Gateway system were used for	Historic	NDE

Table I-3
Historic Alaska Heritage Resource Survey (AHRs) Sites in Port MacKenzie Rail Extension Project Area^a (page 6 of 6)

AHRs No.	Documented During 2008 Survey^e	Site Name	Site Description^b	Period (Date)	National Register of Historic Places Status^c
TYO-00184 (cont'd)			hauling freight to the Hatcher Pass mines and have been extended over the years by homesteaders, hunters, trappers, and dog sledgers in the area.		
^a Data Sources : ADNR, 2008; Stephen R. Braund & Associates, 2009.					
^b To convert meters to feet, multiply by 3.2808; to convert centimeters to inches, multiply by 0.3937; to convert kilometers to miles, multiply by 0.62137					
^c NDE = a determination of eligibility for inclusion on the National Register has not been made; NRE = determined to be eligible for inclusion on the National Register; NRJ = National Register nomination rejected.					
^d Not a primary reference in this appendix; the Alaska Heritage Resources Survey database on file with the Alaska Department of Natural Resources references this source, and SEA has retained it here to maintain continuity of the information					
^e 2008 cultural resources survey conducted by SEA.					

I.1 References

ADNR (Alaska Department of Natural Resources), Office of History and Archaeology. 2008. 2008 Alaska Heritage Resources Survey. Anchorage, AK: Database on file with State Office of History and Archaeology.

Braund, S. R., & Associates. 2009. Port MacKenzie Rail Extension Project Report of 2008 Cultural Resources Fieldwork.

Kari, J., and J. A. Fall. 2003. Shem Pete's Alaska. The Territory of the Upper Cook Inlet Dena'ina. Second Edition. Shem Pete, Principal Contributor. Fairbanks, AK: University of Alaska Press.

EXHIBIT 6
DRAFT EIS, CHAPTER 6

6. CULTURAL AND HISTORIC RESOURCES

6.1 Regulatory Setting

Applicable Federal, state and local regulations are discussed below.

6.1.1 Federal Regulations

The most relevant Federal laws for the evaluation of effects to cultural and historic resources are the National Environmental Policy Act (NEPA) [42 U.S.C. 4321 *et seq.*] and Section 106 of the National Historic Preservation Act (NHPA) [16 U.S.C. 470 *et seq.*] and its implementing regulations (36 Code of Federal Regulations [CFR] Part 800). NEPA requires a review of major Federal actions for impacts on the cultural environment. The NHPA requires Federal agencies to consider the effects of their undertakings on cultural resources that are listed on, or eligible for listing on the *National Register of Historic Places* (National Register). Section 106 applies when a project has been determined to be an undertaking, which includes a project, activity, or program funded in whole or part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on the behalf of a Federal agency, those carried out with Federal financial assistance, those requiring a Federal permit, license, or approval, and those subject to state or local regulation administered pursuant to a delegation or approval by a Federal agency (36 CFR 800.16(y)). If the undertaking would have an adverse effect on historic properties, the agency must continue to consult to resolve the adverse effects. Federal agencies follow the Section 106 process in reviewing project activities and prescribing appropriate actions to meet the requirements for compliance.

The Section 106 regulations define historic property as

any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register maintained by the Secretary of Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term also includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR 800.16(1)(1)).

In nominating a historic property to the National Register, consideration is given to both the significance and integrity of the property's historic qualities. For a cultural resource (e.g., districts, sites, buildings, structures and objects) to be eligible for listing on the National Register, it must possess integrity of location, design, setting, materials, workmanship, feeling and/or association (36 CFR 60.4).

Other relevant legislation that applies to cultural resources includes the Antiquities Act of 1906 (16 U.S.C. 431 *et seq.*); the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470 *et seq.*); the National Trails System Act (Public Law 90-543); the American Indian Religious Freedom Act of 1978 (Public Law 95-341); Section 4(f) of the Department of Transportation Act (49 U.S.C. 303); the Archaeological and Historic Preservation Act of 1974 ("Moss-Bennett" Act); Executive Order 13007, *Indian Sacred Sites*; and the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-3013).

6.1.2 State Regulations

Alaska Statute 41, Chapter 35, addresses historic preservation issues on state-owned lands. If no Federal permits were required, this statute would be the prevailing legal authority for cultural resources in the undertaking.

6.1.3 Local Regulations

The Matanuska-Susitna Borough (MSB or the Borough) is an interested party in consultation, and has a regulatory responsibility under the NHPA. The MSB is a certified local government under the NHPA (16 U.S.C. 470a(c)) and therefore has the ability to manage its own historic resources. As part of its duties, the Borough must enforce the appropriate state or local historic properties legislation; establish and maintain an adequate and qualified historic preservation review commission; maintain a system for survey, inventory and review of historic properties in its jurisdiction; provide for adequate public participation in the local historic preservation program, including the process of recommending properties for nomination to the National Register; and satisfactorily perform the responsibilities delegated under the NHPA.

6.2 Study Area

The study area includes the area from the Susitna River east to Point MacKenzie, Knik, and the Parks Highway, including Houston and the area just north of Willow (Figure 6-1). This area encompasses historic trails and resource users, including dog sledders, all-terrain-vehicle users, and snowmachiners, who travel within and beyond the area to hunt, trap, camp, and participate in other recreational activities. For cultural resources, the study area may be broader than the area of potential effects in order to identify the context within which cultural resources may be evaluated for significance.

The area of potential effects is defined in the Section 106 regulations as: “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of the undertaking and may be different for different kinds of effects caused by the undertaking.” (36 CFR 800.16(d)). The geographic area within which the proposed project could directly alter the character or use of a cultural resource includes the 200-foot-wide right-of-way (ROW) and the area of ground disturbance. Examples of direct alterations to cultural resources from proposed rail line construction or operations include physical destruction of or damage to all or part of the resource; removal of the resource from its original location; change in the character of the resource’s use or of physical features within the resource’s setting that contribute to its historic significance; or change in user access to traditional use sites or loss of cultural identity with a resource.

The geographic area within which the proposed project could indirectly alter the character or use of a cultural resource labeled “Project Area” on Figure 6-1, was set at a maximum of one mile on either side of the ROW centerline to establish a study area for the identification of historic properties that may be sensitive to visual or noise effects. One mile broadly encompasses the maximum extent for visual elements that have the potential to diminish the integrity of a property’s significant historic features, particularly in areas of low vegetation and flat

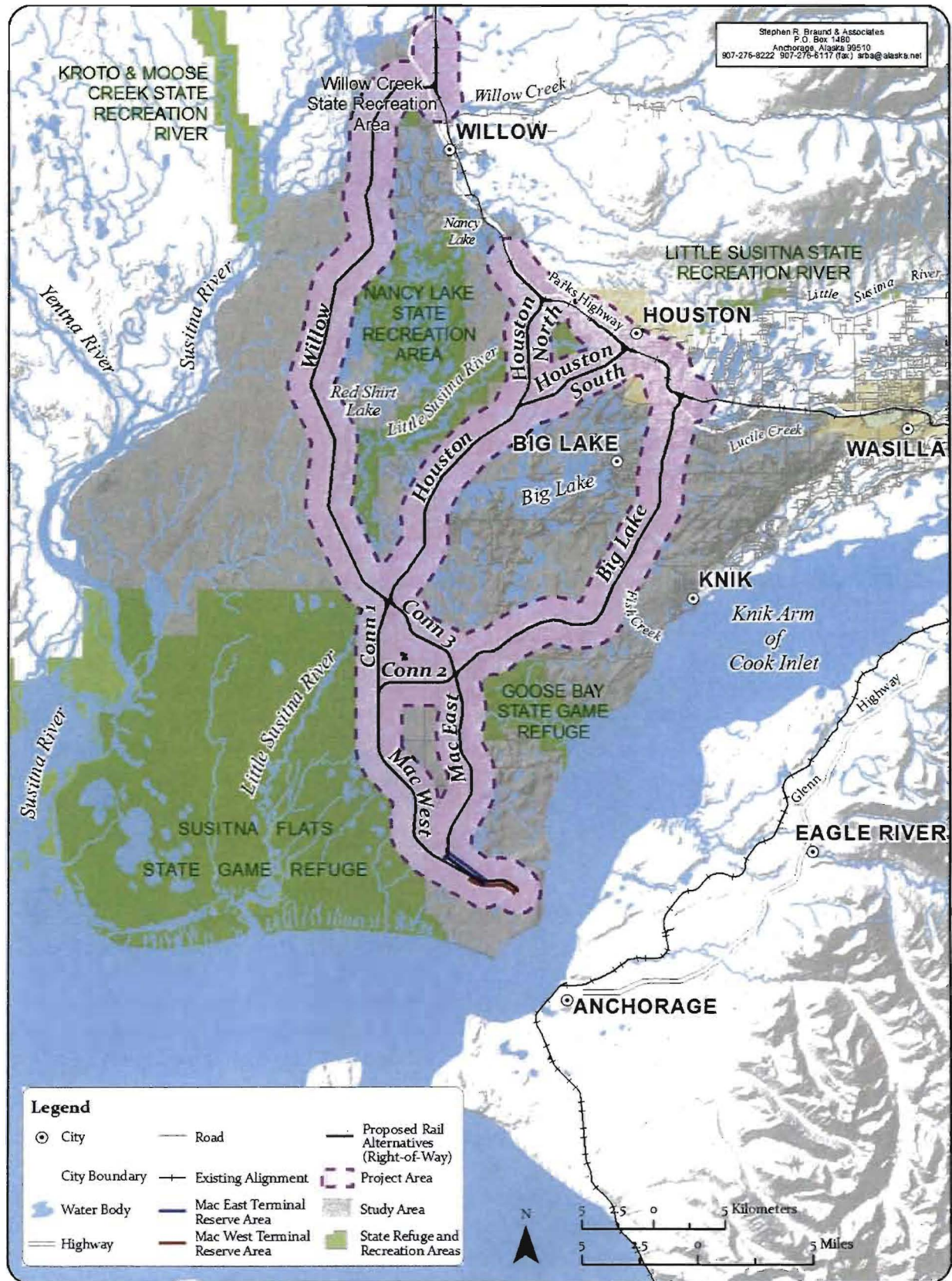


Figure 6-1. Port MacKenzie Rail Extension Study Area

topography. Other indirect alterations would typically have the potential to alter the character or use of a cultural resource much closer to the ROW centerline than one mile. Such alterations could be caused by the introduction of vibration, noise, or atmospheric elements, and vulnerability to erosion. The area within the 3 dBA noise increase contour can be quite large if the ambient sound level is sufficiently low, and for some alternatives, this distance was almost 1 mile (see Chapter 9). Historic trails and traditional-use areas in the study area may also be included in the area of potential effects.

6.3 Analysis Methodology

The Board's Section of Environmental Analysis (SEA) performed an initial literature review and consulted the Alaska Heritage Resources Survey database and other databases to identify known cultural resources in the study area (ADNR OHA, 2008a). A review of scoping documents indicated the prominence of snowmachine and all-terrain-vehicle use, which combines the trails historically used for dog sledding and skiing with modern recreational use. Some users described a history of all-terrain-vehicle and snowmachine use that goes back to 1960.

A cultural resources field survey by SEA in 2008 was limited to areas within the proposed 200-foot ROW, where direct effects to cultural resources would be most likely (SRB&A, 2008). SEA developed a probability model for guiding cultural resource surveys along the various rail line alternatives using available Geographic Information System data inputs (e.g., previously documented cultural resource locations, historic trails, waterways, and Dena'ina placenames) to generate maps identifying areas of low, moderate, and high probability for cultural resources. SEA used this probability model and information from the field survey to identify the alternatives that would have the least potential impact to cultural and historic resources. Areas with a greater likelihood of having cultural resources nearby include banks along streams, lakes, and other waterways; ridges and other promontories; other known sites and Dena'ina place names; and trails. Wetland areas are considered to have the lowest potential to have cultural resources. SEA selected a sample of the total number of miles of the proposed alternatives for the cultural resources survey.

A three-person survey crew performed the SEA field surveys. Crew members were spaced 20 meters (about 65 feet) apart and used handheld Global Positioning System units to guide them along transect routes following or paralleling the centerline of the ROW. The areas surveyed included all probability levels (low, moderate, and high) along the ROW to focus on high- and medium-probability levels and include a sampling of low-probability areas. The field crew surveyed 25.5 of the 115 miles of proposed alternatives (Figure 6-2). The survey resulted in the discovery of 36 cultural resources within 1 mile of the ROW that were deemed appropriate for inclusion in the Alaska Heritage Resources Survey. The State Historic Preservation Officer reviewed the field research design before the survey.

SEA also initiated government-to-government consultation with 10 Federally Recognized Tribes, tribal groups, and Alaska Native Regional Corporations. Consultation letters and meetings asked interested parties to report their concerns regarding cultural resources in the study area, as well as identify any cultural resources in the study area not documented during the literature review, the Alaska Heritage Resources Survey review and SEA field surveys. Cultural resources

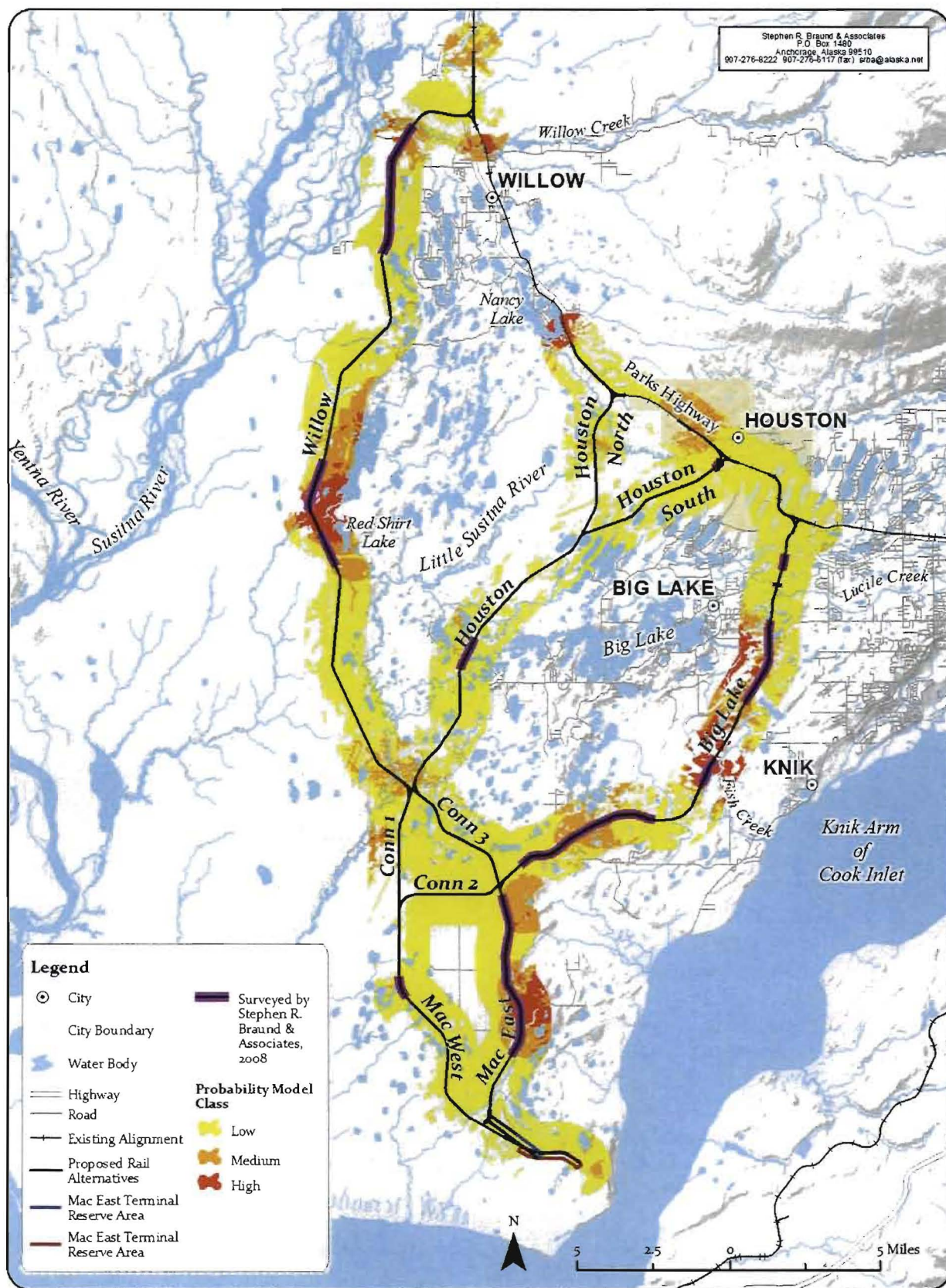


Figure 6-2. Probability Levels for Cultural Resources and 2008 Survey Areas

consultation included identification of any potential cultural landscapes or traditional cultural properties in the study area. Based on the literature review, information from the Alaska Heritage Resources Survey, consultation, and fieldwork, SEA identified cultural resources and mapped their locations in relation to the proposed alternatives. To encompass the extent of direct and indirect impacts that could affect the eligibility of cultural resources for inclusion on the National Register, SEA defined multiple areas of potential effect. The organization of the discussion of impacts is by northern and southern rail line segments and includes a description of any potential short-term (e.g., construction), long-term, and operations impacts on cultural resources.

All unsurveyed areas of the proposed ROW could contain cultural resources eligible for listing on the National Register, and surveyed areas could have buried archaeological or paleontological sites that are eligible but undiscovered.

6.4 Affected Environment

6.4.1 Prehistory

The study area was transformed by glaciers that retreated approximately 12,000 years before present, leaving behind a landscape dominated by postglacial landforms including complex ridge systems, outwash gullies and lakes, kettle lakes, moraines, eskers, and streams. The ridge systems consist of resistant rock and are connected to a system of moraines, kames, and eskers (formations of gravel, silt, and sand formed by ice or water movement in a glacier and left behind when the ice melted and the glacier retreated) (Dilley and Dilley, 2000).

After the ice retreated, the area was likely a desert-like zone with blowing dunes of glacially produced silt, large blocks of ice partially buried in glacial debris and a landscape of exposed rock and gravel with windblown loess deposits in the lee of winds coming off the retreating glaciers and up the rapidly forming Cook Inlet. Soon, however, a succession of plant types already present in the region would colonize the desert-like area and stabilize the soils. It is likely that mosses and lichens first colonized the area, stabilizing the soils and drawing in animals that consume these primitive life forms. Later, willows, alders, and other woody shrubs became established, created wind blocks, and entrained soil beneath vegetation and in root mats (Reger and Bundtzen, 1990).

After plants pioneered the region, it is likely that a variety of mammals and fish colonized the land and waters. People followed the large animals into the area and hunted them on the margins of the retreating glaciers. These peoples were already accustomed to life in the glacial margins and arrived with a sophisticated suite of stone and organic tools, clothing, housing, social structure, and language (Reger and Bundtzen, 1990; Reger and Pinney, 1996).

6.4.1.1 Prehistoric Sites

Known sites in the Upper Cook Inlet area include Beluga Point on Turnagain Arm (Reger, 1996, 1998), sites in the Kenai Mountains (Reger and Pipkin, 1996), several sites in the Matanuska Canyon (West, 1996), a series of sites along the upper Susitna River (Dixon *et al.*, 1985) and two

localities near Long and Ravine Lakes (Reger and Bacon, 1996; Robinson *et al.*, 1996). These sites evidence an early core-and-blade technology in which stone blades were struck from a core material and later worked and retouched into finished form. There have been no Paleo-Indian sites found in Southcentral Alaska with diagnostic type artifacts such as fluted points (chipped tools notched near the base for hafting) and burins (stone tool with characteristic flaked end used for engraving).

People using early core-and-blade technology likely hunted land animals in the Cook Inlet region. Elsewhere, core-and-blade technologies are found on the coast, probably the tools of marine-mammal hunters. By analogy to other radiocarbon dated sites in Alaska, Cook Inlet core-and-blade technologies date from 7,500 to 10,000 years ago (Reger, 2003). The interpretation of the period after these core-and-blade occupations is not clear, probably because several different culture groups with various stone-tool technologies were in the area at the same time. Some 4,000 to 5,000 years ago, notched stone points were used in the upper Susitna River basin. Reger (2003) describes a "distinctive, stemmed, chipped stone projectile point and a high-shoulder form of knife" from Beluga Point during this time. There are no slate tools, ground, polished or pecked, in the core-and-blade assemblages.

Approximately 4,200 years ago, people with ground slate spear points and knives camped at Beluga Point and probably in the upper Yentna River drainage (Dixon, 1993; Reger, 1981). Kachemak Culture people with a marine-oriented harvest technology spread over much of the Cook Inlet basin during the period 2,500 to 1,000 years ago. The Kachemak Culture was comprised of Eskimo people that originated in the Kodiak Archipelago and was characterized by elaborate and distinctive burial practices, notched cylindrical stones, fishing hooks, and other utilitarian items that allowed them to harvest from a marine environment (Langdon, 2002). Inland, the stratified Hewitt Lake site has a Riverine Kachemak component in the lower levels, while upper levels contain later Dena'ina components (Dixon, 1996). Riverine Kachemak people relied on salmon harvests, as evidenced by numerous small, notched pebble net sinkers. Ground slate was used for ulus (semi-lunate knives) and spear points. Chipped stone arrow points are common in these assemblages. These people were likely hunters and gatherers who followed game and plant resources with the seasons to support themselves. The Dena'ina, an Athabascan speaking culture, occupied the Cook Inlet area from approximately 1,500 years ago, and were characterized by semi-subterranean houses, tools of primarily bone and wood, and exploitation of both a marine and terrestrial subsistence environment (Reger, 2003).

6.4.1.2 Prehistoric Cultural Sequences

Based on the description of the known sites in Upper Cook Inlet, it is likely that prehistoric sites in the study area fall into one of the cultural sequences listed in Table 6-1. The description of the Hewitt Lake site (Dixon, 2003), indicates the possibility that beneath the Dena'ina sites nestled among the lakes, swamps, and streams of the Susitna lowland are older sites from Kachemak and earlier peoples who preceded them centuries and even millennia before.

6.4.2 History

European contact in the study area began in the late 18th century. During this time, Upper Cook Inlet was occupied by the Dena'ina, a group of Athabascan-speaking people, related by language

Table 6-1
Prehistoric Cultural Sequences in Upper Cook Inlet

Archaeological Phase/ Culture Group	Period	Description	Source
Early Core and Blade	7,500 to 10,000 years before present	Large core and blade technology	West, 1996
Notched points	4,000 to 5,000 years before present	Notched points from Upper Susitna, stemmed projectile points and a high shouldered knife at Beluga Point	Reger, 1996, 1998
Ground Slate	4,200 years before present	Ground slate spear points found at Beluga Point and the Upper Yentna River drainage	Reger, 2003
Riverine Kachemak	2,500 to 1,000 years before present	Ground slate points, knives, and spears; notched pebble net sinkers, and some chipped stone points.	Dixon, 1993; Reger, 1981
Dena'ina	1,500 years before present	Organic tool technology with little stone used. Copper pins and projectile points	Dixon, 1996; Reger, 2003
Chugach	800 years before present	Polished slate projectiles, knives, spear points. Occurs contemporaneously with Dena'ina materials	Reger, 2003

and lifeways to groups in Interior Alaska and more distantly to the Tlingit and Eyak of the northwest coast of North America (Townsend, 1981). The Athabascan languages originated in Central Siberia and spread throughout interior Canada and as far south as the Navajo and Apache in Arizona and New Mexico (Vajda, 2008). Outer Cook Inlet and the surrounding coasts and islands were the home of the Chugach Eskimo or *Sugpiat* people, more recent arrivals to the area and related to the *Yup'it* of Southwest Alaska. These groups had complex relationships that combined some peaceful interactions with occasional warfare, slave and wife raiding, and sneak attacks on other groups (DeLaguna, 1975; Osgood, 1966).

6.4.2.1 Dena'ina Place Names and Trails

There are a number of Dena'ina trails and numerous Dena'ina language place names in the study area. Place names indicate the history of Dena'ina land use for those who used the lands and survived to be interviewed by linguists (Kari and Kari, 1982; Kari and Fall, 2003). Trails in the study area also include later Euro-American trails, which often were based on Dena'ina trails that preceded them. Trails to mineral lodes and claims often branched off existing Dena'ina trails, but in some cases were completely new trails cut and improved by miners and explorers. Appendix I, Table I-1, lists 88 Dena'ina place names, their English translations, a description of the sites and their associations, and code numbers corresponding to a map (Figure 6-3).

6.4.2.2 Russian America, 1740 to 1867

Early interactions in the late 1700s between the Dena'ina, the Russians, and other European groups were limited by the intense interest elsewhere in Alaska for sea otter pelts that were traded to China in exchange for tea, spices, chinaware, cotton, and silk. There were few sea otters in the Outer Cook Inlet and in Upper Cook Inlet when British explorers James Cook and George Vancouver visited in the 1770s (Beaglehole, 1967; Cook, 1967). French, British,

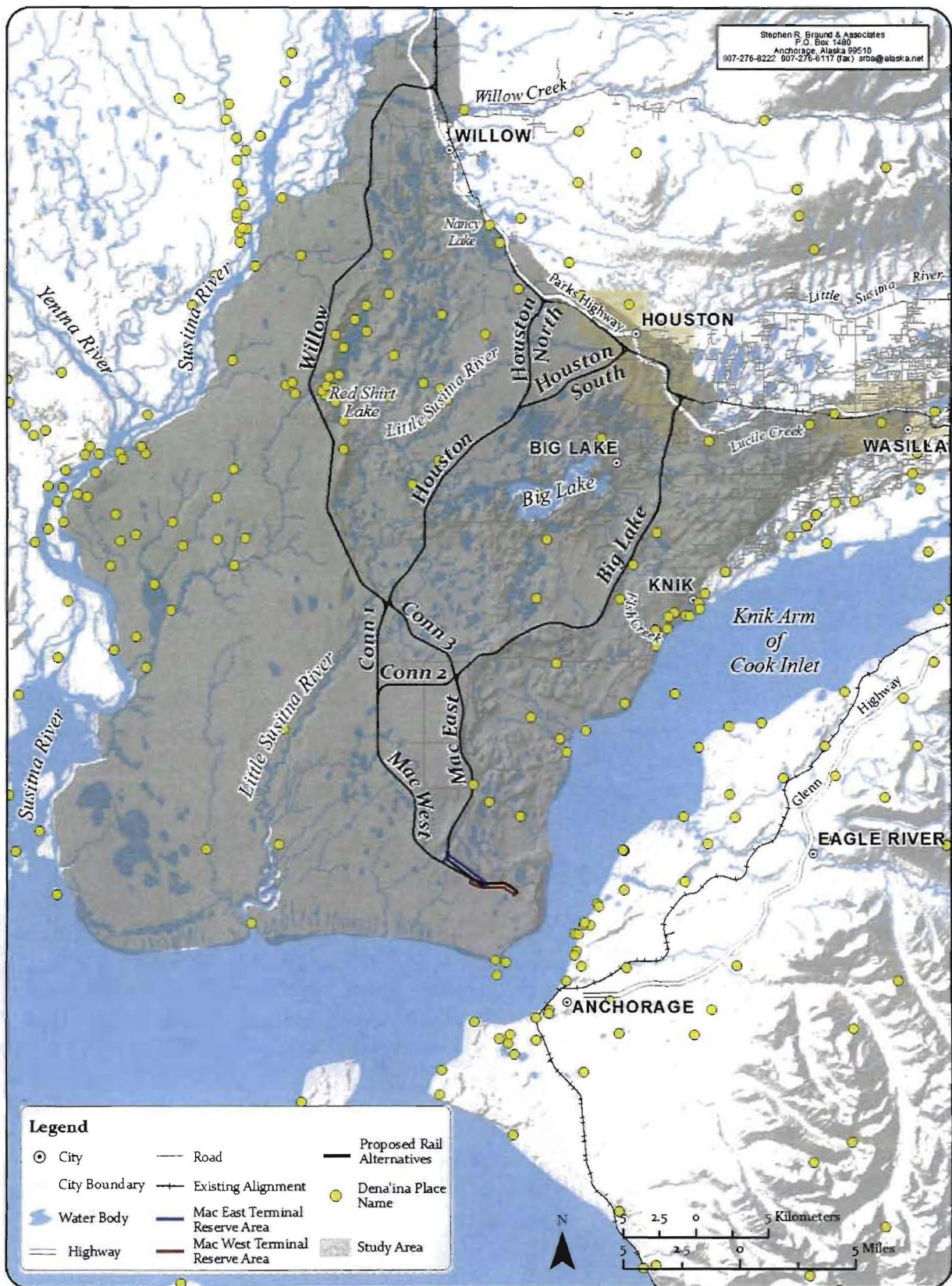


Figure 6-3. Locations of Dena'ina Place Names in and near the Study Area

Spanish, and American traders and explorers were encroaching on Russian territory by the 1790s and trading for otters and other pelts both in the waters of the Pacific and inland, where the Northwest Company, Hudson's Bay Company, and other fur traders had trading posts. After the limited number of sea otters in Cook Inlet were depleted, the Russians proceeded down the coast, building a base in California and taking crews of Aleut hunters as far south as Chile until the sea otters were depleted along the entire coast (Black, 2004; Solovjova and Vovnyanko, 2002; Wrangell, 1980).

With the sea otters depleted, the Russians began a period of otter management in their territory designed to rebuild the population and shifted their trading efforts to land furs, especially beaver, but including mink, bear, river otter, moose, and caribou hides (Black 2004; Wrangell 1980). These were traded within Alaska, with Russians serving as go-betweens for trade between Indians and Eskimos, and with China and Britain. The Russian fur trade companies designated local residents in each village to serve as managers for trade, or "toions," who kept track of the pelts stored for trade to the Russians and encouraged men to hunt for fur animals (Black, 2004; Solovjova and Vovnyanko, 2002). Once a year groups would come out of the interior by boat and trade pelts to the Russians in exchange for tea, sugar, flour, cloth, beads, axes and knives, and other goods such as pots, pans, and tea ware. People frequently converted sugar and flour to alcoholic beverages and held a party until these novel luxuries were depleted and people followed long-established trails back to their home territories. The Dena'ina used their central geographic position and network of trails to serve as middlemen traders between the Russians and the groups farther in the interior, gathering relatively great wealth in a short time (DeLaguna, 1975; Osgood, 1965; Townsend, 1981; Stafeev, 1985).

From 1741 to 1838, Europeans inadvertently introduced the first of many epidemic diseases that devastated Native populations throughout the Arctic (Fortune, 1992). Smallpox, tuberculosis, measles, mumps, chicken pox, influenza, and other diseases would flare up and spread widely due to poor hygiene, wide travel, and winter crowding, killing perhaps more than half of all Native people in Alaska in one epidemic that started in 1838. To the present, there have been periodic epidemics that caused numerous deaths and long-term debilitating illnesses, ameliorated in the 1840s with the first vaccines and in the 1940s with the introduction of antibiotics.

During the late 18th Century, the Dena'ina and two neighboring groups occupied the Susitna Valley. Dena'ina from Cook Inlet had established trails through the Alaska Range to trade marine mammal fat with interior Dena'ina peoples and possibly the Upper Kuskokwim people on the western side of the Alaska Range. The neighboring Ahtna people of the Copper River basin were closely related to some Dena'ina bands and shared some territory near Talkeetna and in the Matanuska Valley past King Mountain with the Upper Cook Inlet Dena'ina (Kari and Fall, 2003). From these areas, the Ahtna would venture to Cook Inlet to trade with the Russians. The Russians called them Mednovtsie, people of the copper, for the native copper they often brought for trading. Many Ahtna people strategically married into Dena'ina families, as the Dena'ina were considered wealthy for their proximity to both marine mammal fat sources and European trade goods. The Russian Orthodox Church eagerly sought to incorporate the Ahtna into the church but had failed several times and lost clergy in conflicts with Ahtna bands (Kari, 1986; Znamenski, 2003). Farther up the Susitna Valley, Broad Pass connected to the Upper Tanana people, recipients of trade goods and marine mammal fat from the Dena'ina, but who were rarely inclined to travel through Dena'ina territory for trade.

6.4.2.3 Alaska Purchase and Territory, 1867 to 1958

Early Settlement, 1867 to 1915

In 1867, the United States purchased Alaska from Russia. Under the Treaty of Cession, the Dena'ina were to be treated as semi-settled peoples, equivalent to contemporary Indians (Black, 2004). However, during much of the early days of American administration there was no direct supervision or provision for government, schools, or other services. The U.S. Army had several small posts in Alaska, then the U.S. Navy administered the territory, and finally the Revenue Cutter Service, precursor to the U.S. Coast Guard, conducted court and provided medical care during cruises around the coast. Only after the first gold rushes in Canada, which spilled over into Alaska, was a territorial government formed to record land claims for mineral development (Bancroft, 1886; Naske and Slotnick, 1987). Ivan Petroff, an assistant to the noted American historian, Hubert Bancroft, was hired to perform a Census and summarize the resources of the territory in 1879 (Bancroft, 1886; Petroff, 1881, 1884).

Dena'ina people continued to interact primarily with fur traders who lived at widely spaced trading posts, including O. G. Herning, a fur trader at Knik. The Russian Orthodox Church, which had flourished among the Dena'ina, maintained a limited presence at Kenai, from where a traveling priest would sometimes make visits to the Susitna River villages (Kari and Fall, 2003; Potter, 1967; Znamenski, 2003). There were several conflicts between the fur traders, priests, and Dena'ina, and early officers of the court did not like to intervene (Znamenski, 2003).

The Gold Rush in the Klondike in 1898 was the first of several events that would change Alaska from an isolated, ignored outpost to an organized territory with allure for hunters, adventurers, and sportsmen. Government explorers like Herron (1901), Mendenhall (1900), Brooks (1911), and Glenn were accompanied by private explorers, hunters and mountain climbers like Browne (1913), Hawthorne (McKeown, 1951), and Studley (1911).

Gold prospecting created the next great influx of Euro-Americans into Upper Cook Inlet, beginning with discoveries on the Kenai Peninsula and Turnagain areas in 1891 (Buzzell, 1986). Soon, communities began to spring up to serve the provisioning needs of the Klondike and other gold rushes taking place throughout Alaska. In some cases, existing trading posts filled this need; in other cases, towns such as Knik and Susitna Station grew up along Cook Inlet. The community of Knik was the largest settlement in the Matanuska-Susitna Valley in the 1890s. At one time it had a population of 500, and included stores, hotels, restaurants, and churches. Knik served as a transfer point for passengers and freight from ocean-going steamers to smaller vessels or for overland travel. Some homesteads were established around Knik and the western end of the Matanuska-Susitna Valley during the first 20 years of the 20th Century. Fortner-Welch (2002) described the life of several prominent homesteading families, including bachelor homesteader, Herman Gronwoldt, who homesteaded at the east end of Big Lake. The establishment of Anchorage in 1915 as the Alaska Railroad construction headquarters and ship anchorage spelled the end of Knik's prosperity. By 1917, it was virtually abandoned.

Establishing Government, 1915 to 1939

American government did not reach Upper Cook Inlet with any lasting authority until the 1915 establishment of Anchorage at the site of what was then known as Knik Anchorage at the mouth of Ship Creek. From here, the farthest point of navigability for ocean-going ships in Knik Arm, materials for construction of the Alaska Railroad were unloaded and barged to shore.

Connections were soon built to existing rail lines of the former Alaska Northern Railroad in Turnagain Arm. The government having purchased the failed private railroad to create the Alaska Railroad system and reach the coal fields of the Matanuska Valley, the ice-free port at Seward, and the interior river ports of Nenana and Fairbanks (Wilson, 1977). Many Dena'ina people living in the Susitna Valley sought employment on railroad construction crews because fur prices had crashed after the Alaska Commercial Company monopolized the trade and bought out competitors like the Western Fur and Trading Company. One advantage of working for the railroad was access to commissary goods brought in for the comfort and support of railroad workers but were familiar as trade goods to the Dena'ina. Another advantage was the employee rail pass, which allowed free travel on the railroad. Workers could spend the summer laying track along the line, then use their rail passes to travel to Talkeetna and beyond, to which they formerly had to walk or paddle (Kari and Fall, 2003). Others lived near the Matanuska Valley coal mines and worked there seasonally, but the coal mines closed as oil became the fuel of choice for Navy ships and better, hotter burning coal was mined near Nenana (Wade, 2002).

After the 1918 Spanish influenza devastated the remaining Native population of Upper Cook Inlet, the survivors resettled at what is today Tyonek. There had been several Tyonek village sites along that stretch of coast before then. The last Tyonek people settled around a miner's community, which was used as a port site for barging miner's gear to shore and boasted a post office, and became the refuge and orphanage for survivors of the worldwide epidemic (Kari and Fall, 2003). Families settled at Tyonek or in the Susitna Valley at or near traditional sites intersected by the railroad, where many men continued to work until the 1923 completion of the line to Fairbanks, and some stayed on as maintenance-of-way workers. This allowed seasonal travel through their homeland and integration into the cash economy for access to luxuries and necessities. Commercial fishing was another compromise between the need for money, the desire for gender-appropriate work, and the strong desire to maintain cultural traditions and practices and connections to their lands. A Native industrial school was built at Eklutna along the railroad, near the site of a former Dena'ina village, and Native people from all over the state attended and learned contemporary academic and industrial skills. Other Dena'ina people began to attend Indian schools at Wrangell and Sitka, and the Chemawa Indian School in Salem, Oregon. Some returned to their communities, but because of disease, death, or pressure to assimilate Native peoples into contemporary urban society, many did not return (Barnhardt, 2001; La Belle and Smith, 2005; Hirshberg and Sharp, 2005).

Increasing populations of European Americans in the Upper Cook Inlet area made it correspondingly difficult to maintain their traditional land use patterns, because homesteaders, settlers, and farmers began to colonize the promising lands of the Susitna and Matanuska Valleys. Following the construction of the railroad, the Federal Government subdivided lands for homesteads and farms, and in the 1930s began a New Deal-era program to resettle farmers from Minnesota to the area as a poverty reduction effort (Miller, 1975). The 1930s saw two ethnographic and archaeological surveys of the Dena'ina conducted by Frederica DeLaguna and

Cornelius Osgood, with some observations by Aleš Hrdlička, who traveled through Alaska several times studying the physical anthropology of its Native and immigrant peoples (DeLaguna, 1975, 1996; Hrdlička, 1943; Osgood, 1966).

World War II to Statehood, 1939 to 1958

The entry of the United States into World War II on December 7, 1941, caused far-reaching consequences throughout the Alaska Territory. Before the war, the Federal Government underestimated the Territory's strategic importance. By the end of the war, after the Japanese had attacked, occupied, bombed, and been routed from the Aleutian Islands, the Federal Government better understood the Territory's location and importance. Tens of thousands of military personnel served in the Territory, dozens of airfields were built, the AICan (Alaska) Highway was constructed, and billions of dollars were spent on other civilian and military projects (Bush, 1984).

World War II also affected the area across from Anchorage on the west side of Knik Arm, an effect that still lingers. The Susitna Gunnery Range is an area with munitions and explosives of concern and unexploded ordnance. The military fired munitions from the vicinity of Cairn Point westward across Knik Arm. The area from Lake Lorraine and the shoreline, inland and northward along the Point MacKenzie access road, is reported to have had confirmed finds of munitions and explosives of concern and unexploded ordnance. The military also conducted various other training activities across the inlet, including survival training (Delkettie, 2008). During this period, military personnel used the area across the inlet, particularly the Big Lake area, as a recreational location for soldiers from Elmendorf Air Force Base and the U.S. Army's Fort Richardson.

Urbanization in Anchorage continued slowly, with Dena'ina people being pushed away from their former home sites in and near the city by development pressure, lack of property rights, and race-based discrimination. Dena'ina people were displaced from Anchorage before and during World War II, when a traditional fishcamp near Ship Creek (Tak'at), a location for the First Salmon ceremony and gathering place and potlatch site for local and non-local Native people, was buried by debris pushed over the bluff during the construction of Elmendorf Field beginning in 1940 (SRB&A, 2006). The expansion of Anchorage and additional removal of lands withdrawn for the military further displaced the Dena'ina people from long-used fish camps along Chester Creek, Ship Creek, Point Campbell, and Point Woronzof (Fall, 1981). Some Dena'ina continued to fish from Fire Island and others near Eklutna, but Anchorage was considered a dangerous and unfriendly place by its former seasonal residents (Kari and Fall, 2003).

6.4.2.4 Statehood, 1959 to 2008

Alaska officially became the 49th state on January 3, 1959. In 1964, voters created the Matanuska-Susitna Borough, which covers an area the size of the Commonwealth of Virginia, and Palmer became the Borough seat. Roads continued to be improved, with a major upgrade completed in 1965 when the new Knik River Bridge (new Glenn Highway) was completed. Houston was incorporated as a Third Class City in 1966. The Anchorage to Fairbanks road (Parks Highway) was completed in 1971, shortening the distance between the two cities by more

than 100 miles (Glenn Richardson Highway Route) and creating a year-round all-weather road up the Susitna River valley to Cantwell and north. With these improvements in transportation and because of the large tracts of land available for subdivision, the Matanuska-Susitna Valley began to grow into a major population center, increasing from 6,509 people in 1970 to 59,322 in 2000 (ADOLWD, undated).

Among the last Dena'ina people to live a mixed traditional life on the land was Shem Pete, who lived in a cabin on Nancy Lake. He and his son Billy Pete were informants for a book documenting what the two men recalled of traditional life as they had lived it. Numerous Dena'ina place names are applied to the landscape in the project area based on this and other books documenting the Dena'ina presence in Upper Cook Inlet. Shem and Billy Pete were eventually forced off their land by land speculators who tricked them out of their rights to the land; they settled in Tyonek (Kari and Fall, 2003).

The 1971 Alaska Native Claims Settlement Act and the 1980 Alaska National Interest Land Claims Act changed Dena'ina land access and use permanently. The Alaska Native Claims Settlement Act was designed to transfer rights to lands taken by the Federal Government to Native peoples and to organize Alaska Natives into a suite of corporate entities instead of dependent but sovereign tribal entities, and extinguish their aboriginal land rights with the Federal Government. The Claims Settlement Act was enacted to settle the long-standing conflicts over land rights of Alaska Native people in the face of the discovery of the Prudhoe Bay oil deposits and the pending construction of the Trans-Alaska Pipeline System. The Alaska National Interest Land Claims Act was enacted to finalize land claims in Alaska, claim lands for parks and national monuments, extinguish the right of the President of the United States to select additional national monuments in Alaska, and adjust some terms of the Claims Settlement Act to ease some Native concerns and facilitate land management by state and Federal agencies (Williss, 1985). Some aspects of these two Acts continue to be points of contention between state, Native, and Federal parties, particularly land rights, subsistence preferences for rural residents, and access rights to different parcels using modern conveyances such as four wheelers, tracked vehicles, amphibious vehicles, snowmachines, and aircraft (STB, 2008).

With the residential development of the Matanuska-Susitna Valley continuing to increase, private property holdings and land use access in the Susitna Valley are growing issues. Since the 2000 Census, the Knik-Fairview Census Designated Place, a portion of which is in the study area, has had the greatest average annual growth rate (7.5 percent) of places in Alaska with 2,000 or more people, and the MSB continues to be the fastest growing area in the state, with an average annual growth rate of 4.1 percent (ADOLWD, 2008). Numerous subdivisions have been and are being built, and access to public land is being cut off by these developments and by landowners who want to maintain the rural character of the landscape in the face of residential and commercial development in the area. In recognition of the growing access and land use issues created by development, the MSB Assembly voted unanimously in December 2008 to create a special Knik Sled Dog and Recreation Special Land Use District to protect sled dog trails, some of which connect to the Iditarod National Historic Trail, from future development projects (Wellner, 2008).

6.4.3 Cultural Resources in the Project Area

Archaeological sites, historic sites, cultural landscapes, and traditional cultural properties are likely to be found or have been found within the study area, project area, and ROW in the course of research for the proposed Port MacKenzie Rail Extension.

Archaeological sites might consist of historic and prehistoric sites, and structures and deposits of material culture on the surface or buried with few or no written accounts of their existence.

Historic sites are trails, buildings and structures (cabins, houses, and other purposed structures) that have gained historic significance in and of themselves for design or other reasons, from association with famous or historically significant persons or events, or for representing specific architectural styles. As stated in the National Register Federal Program Regulations (36 CFR 60.4) the historic site must be more than 50 years old to be eligible for inclusion in the National Register, unless there are exceptionally significant attributes that contribute to the significance of the site.

Cultural landscapes and traditional cultural properties are properties that are definable to a delimited area or definable space and are significant to the cultural and historical practices of a community. The connection to and use of the property must be ongoing and continuing for it to be considered eligible for inclusion on the National Register. A cultural landscape is “a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or that exhibit other cultural or aesthetic values” (Page, Gilbert and Dolan 1998). Cultural landscapes represent a reflection of human adaptation and use of natural resources expressed through land organization, settlement patterns, land use, systems of circulation, and physical structures (NPS, 1998a). Examples of documented cultural landscapes include the Kennecott Mill Town landscape in Wrangell-St. Elias National Park, the Cedar Pass Developed Area in Badlands National Park, and the Tallgrass Prairie National Preserve cultural landscape. Traditional cultural properties are associated with living Native peoples who have a tradition of using the landscape that is continuous and presently active, and might be religious or secular in practice. Two key components of traditional cultural properties are that they are rooted in a community’s history and are important in maintaining the continuing cultural identity of the community (NPS, 1998b). For traditional cultural properties, if the long-term, continuous practices are blocked or made impracticable, the property can be delisted or made ineligible for listing when the practice no longer continues. Consulting parties did not identify any traditional cultural properties in the study area during government-to-government or NHPA Section 106 consultation for the proposed action.

6.4.3.1 Documented Cultural Resources

Prehistoric Cultural Resources

Figure 6-4 shows the documented cultural resources in the project area and their generalized locations in relation to the proposed rail line alternatives. There are 56 known prehistoric sites within 1 mile of the ROW, 29 of which were discovered during SEA’s field surveys in

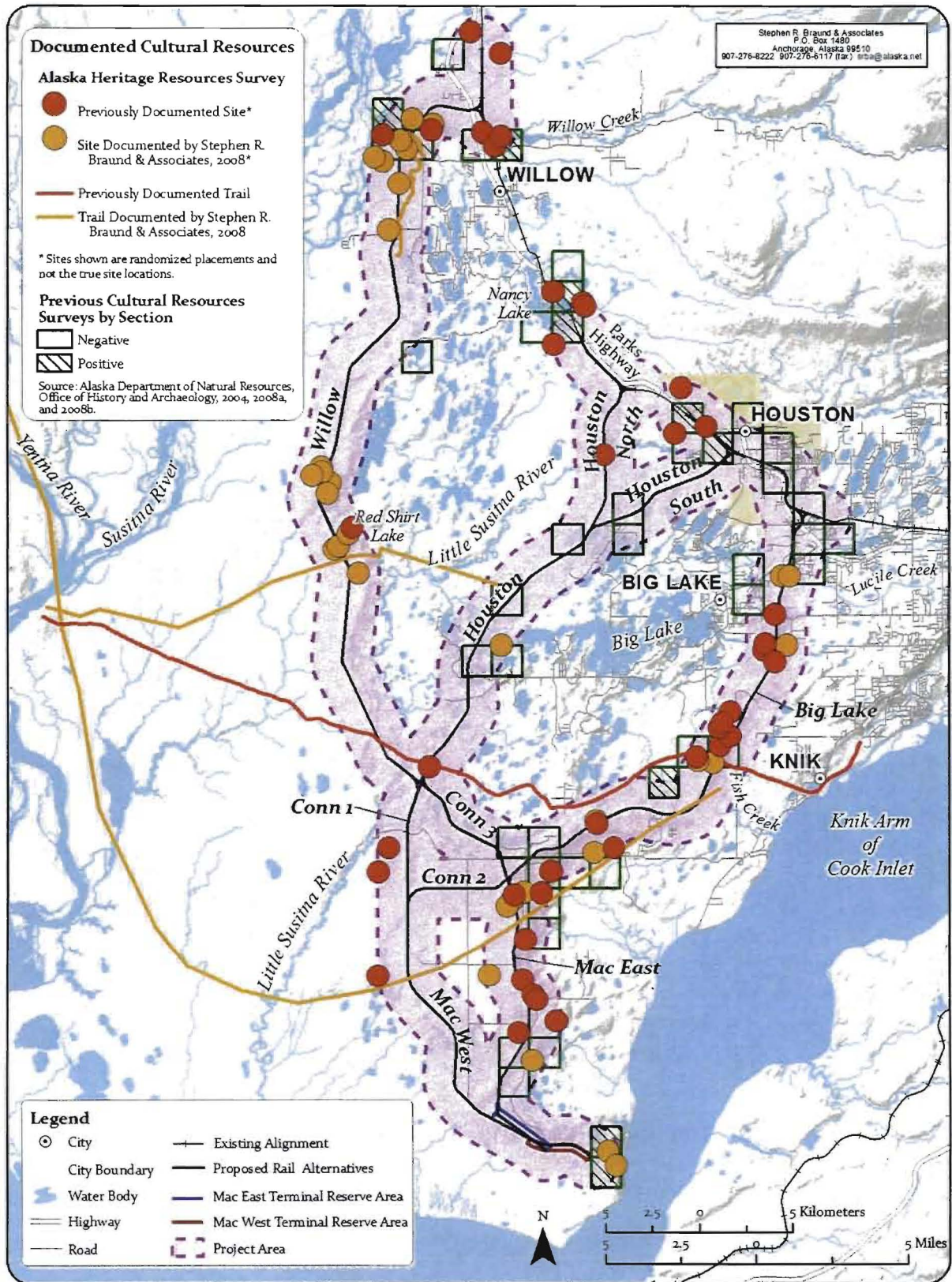


Figure 6-4. Documented Cultural Resources within the Proposed Port MacKenzie Rail Extension Project Area

September and October 2008 (Table 6-2). Most of the sites consist of what are called cache pits, which were used for storage, processing, or freezing foods, and large semi-subterranean house pits, called *nichil* in Dena'ina, used for permanent or winter homes. A determination of eligibility for inclusion in the National Register has not been conducted for any of the prehistoric sites. For more detailed descriptions of these prehistoric sites, see Appendix I.

Table 6-2
Alaska Heritage Resources Survey Sites in the Project Area

	Prehistoric	Historic	Total
Previously Documented Alaska Heritage Resources Survey Sites ^a	27	15	42
2008 Port MacKenzie Rail Extension Survey Documented Alaska Heritage Resource Sites	29	7	36
Totals	56	22	78

^a Source: ADNOR OHA, 2008a.

Historic Cultural Resources

There are 22 historic cultural resources within 1 mile of the proposed ROW (Table 6-2). Most of the historic cultural resources consist of historic structures, including bridges, roadhouses, cabins, and railroad stations. Seven of the historic sites listed were discovered during SEA's surveys for the proposed Port MacKenzie Rail Extension. These sites include two cabins, one shooting blind, and three trails. A determination of eligibility for inclusion in the National Register has not been made for any of the historic sites, except for a 1917 Alaska Railroad Corporation (ARRC) bridge at Mile Post 180.8 (determined not eligible) and 1917 ARRC bridge at Mile Post 187.7 (determined eligible). For more detailed descriptions of these historic sites, see Appendix I.

6.4.3.2 Cultural Landscapes

During a March 5, 2008 meeting with SEA, the State Historic Preservation Officer recommended that the assessment of cultural resources for the Port MacKenzie Rail Extension include an analysis of potential cultural landscapes for dog sledding, recreation, homesteading, and agriculture. The following sections briefly summarize the historical context of each of these potential cultural landscapes and based on the detailed review, provide a preliminary evaluation of their eligibility for inclusion in the National Register. SEA further evaluated the integrity of the dog sledding cultural landscape during the summer of 2009 through additional literature and archival reviews, a series of dog sledding-related interviews, and site visits to kennels and dog sledding clubs in the study area.

Dog Sledding

Description

Dog sledding first appeared in Cook Inlet with the Russian fur traders in the late 1700s and early 1800s. Before the arrival of the Russian fur companies in Cook Inlet, the Dena'ina hauled their belongings by packs or with sleds in the winter and only adopted the practice of using dogs to

pull their gear on sleds after the Russian's arrival. The use of dog sleds for transportation and movement of supplies increased dramatically in Alaska, including in the Upper Cook Inlet area, with the gold rush in the late 19th Century and proved to be much more efficient than using horses or mules to haul supplies and mail during long winter months. As the miners came into the Cook Inlet area, small towns and trading posts grew as locations for miners to purchase supplies and to sell their gold and furs. Prospectors would often purchase their supplies of equipment and food in winter and transport them by dog sled to their mining claims farther north. Many miners also trapped for furs to support their prospecting pursuits and families. Knik and Susitna Station were two such hubs that appeared in the Upper Cook Inlet area during the late 1800s and early 1900s. During this gold rush era, besides using dogs to transport supplies or mail, dog races and freight-pulling contests first appeared, the most famous being the All-Alaska Sweepstakes, which first ran in 1908 and began and finished in Nome (Dean, 2005).

As more and more miners came into the Cook Inlet area, a network of dog sled trails, often following early Dena'ina footpaths or natural contours of the land, began to expand across the landscape. Transportation over the numerous wetlands, creeks, lakes, and ponds that cover much of the area between Knik Arm and the Susitna River was most feasible and efficient by dog sled during winter months when the waters froze and snow blanketed the landscape. In response to the need for an overland route to connect Nome to the "Outside" during winter months and in light of recent gold discoveries over 200 miles to the northwest of Knik in Interior Alaska's Innoko District, the U.S. Army's Alaska Road Commission appointed Walter Goodwin to blaze a trail in 1908 from Seward through Cook Inlet at Knik and on to Nome (BLM, 1986). After the discovery of gold in the Iditarod District, located just southwest of the Innoko District, in 1909, this trail later became known as the Iditarod Trail. By the end of the 1920s, the gold rush into the interior had ended and the airplane had begun to replace the dog sled as the major transporter of mail and supplies in Alaska (BLM, 1986). The advent and increasing popularity of snowmachines during the 1960s resulted in the mass abandonment of dog teams across Alaska and loss of much of dog sledding lore (Bowers, undated). Not until the 1970s and the emergence of the world famous Iditarod Race would dog sledding as a recreational activity transition from a local pastime to the official state sport and a focus of winter tourism in Alaska.

The emergence of dog sledding as a popular winter recreational and sporting activity in Alaska and other areas of the world can in part be attributed to certain people living in the Upper Cook Inlet area, including the study area, and associated events beginning in the 1940s. In 1948, Joe Redington Sr., later called the "Father of the Iditarod," moved to Alaska and filed for a homestead near Knik where he started "Knik Kennels" (Page, 2000). In 1967, Joe Redington Sr., Dorothy Page, and the Aurora Dog Mushers Club organized the first Iditarod Trail Seppala Memorial Race. The first running of the race ran between Knik and Big Lake for approximately 27 miles, of which 9 miles ran along the old Iditarod Trail (Iditarod Trail Committee, 2008). By 1973, the race extended from Anchorage to Nome, increased in popularity each year to become the premiere dog sled racing event it is today, and earned itself the name as the "Last Great Race on Earth." Without the contributions of people like Joe Redington Sr., Dorothy Page, and other early dog sledding enthusiasts, and events like the Iditarod Race, the existence of dog sledding as a popular recreational Alaskan pastime would likely not be what it is today, and dog sledding would merely be another chapter in the history of Alaska's development.

In the study area today, dog sledding continues to be a major winter recreational and sporting activity. A number of dog sled kennels operate in the study area, including Knik Kennels, originally started by Joe Redington, Sr., and Happy Trails Kennels, operated out of Big Lake by four-time Iditarod champion Martin Buser. A broad network of trails transecting the study area, both maintained and unmaintained, are used by a variety of users, including dog sledders, for winter recreational and sporting activities. The fame of the Iditarod Dog Sled Race, which originated in and still goes through the study area, has spread from its first Anchorage to Nome race in 1973 comprised of 35 all-Alaskan residents, to 96 contestants in 2008 representing people from Alaska, the Lower 48, and other countries.

The importance of the study area to the dog sledding landscape lies not only in the people and in the series of events related to dog sledding that occurred there, but also to the trails and other historical remains in the study area associated with dog sledding. These events, people, and trails link the historic period of the Iditarod Trail and the mail drivers, prospectors, and adventurers that traveled its route to the world-renowned Iditarod Dog Sled Race of today and the dog racers, recreational sledders, and fans from state, national and even worldwide locations who come to participate in and watch the "Last Great Race on Earth."

Consideration of Eligibility

Dog sledding, its associated trails, and other contributing resources (i.e., dog sledding features such as kennels, clubs, and old roadhouses that have integrity and relate to the periods of significance) in the study area have local, state-level and national significance as a cultural landscape under National Register Criterion A,B, and Criterion Consideration G for events and people related to the Iditarod National Historic Trail and Iditarod Race during the periods 1898 to 1925 and 1967 to 1978. A property can be eligible for the National Register under Criterion A if it was associated with events that have made a significant contribution to the broad patterns of our history and under Criterion B if it was associated with the lives of persons significant in our past. A property achieving significance within the past fifty years is eligible under Criteria Consideration G if it is of exceptional importance. Based on the results of SEA's 2009 dog sledding-related interviews and site visits to the study area, the recommended dog sledding cultural landscape has integrity because the landscape characteristics are present enough to convey the significance of dog sledding related to the Iditarod National Historic Trail and Iditarod Race.

For purposes of this analysis, dog sledding associated with the Iditarod National Historic Trail and Iditarod Race is considered a cultural landscape assumed eligible for inclusion in the National Register. The boundary for contributing resources to the dog sledding landscape extends beyond the study area and would include the remainder of the Iditarod National Historic Trail and other trails, kennels, and locations associated with the landscape's periods of significance. For the EIS however, the dog sledding landscape analysis was limited to the study area. Thus, a preliminary boundary for this landscape in the study area includes the trail network (including the historic trail and race) associated with the 1898 to 1925 and 1967 to 1978 periods of significance and the buildings, kennels, and locations that contribute to the significance of these periods, including the Aurora Dog Mushers Club, Knik Kennels, and Knik Museum and Dog Mushers Hall of Fame. Figure 6-5 shows the contributing trails and other contributing resources (e.g., kennels, buildings, old roadhouses) identified during the course of SEA's

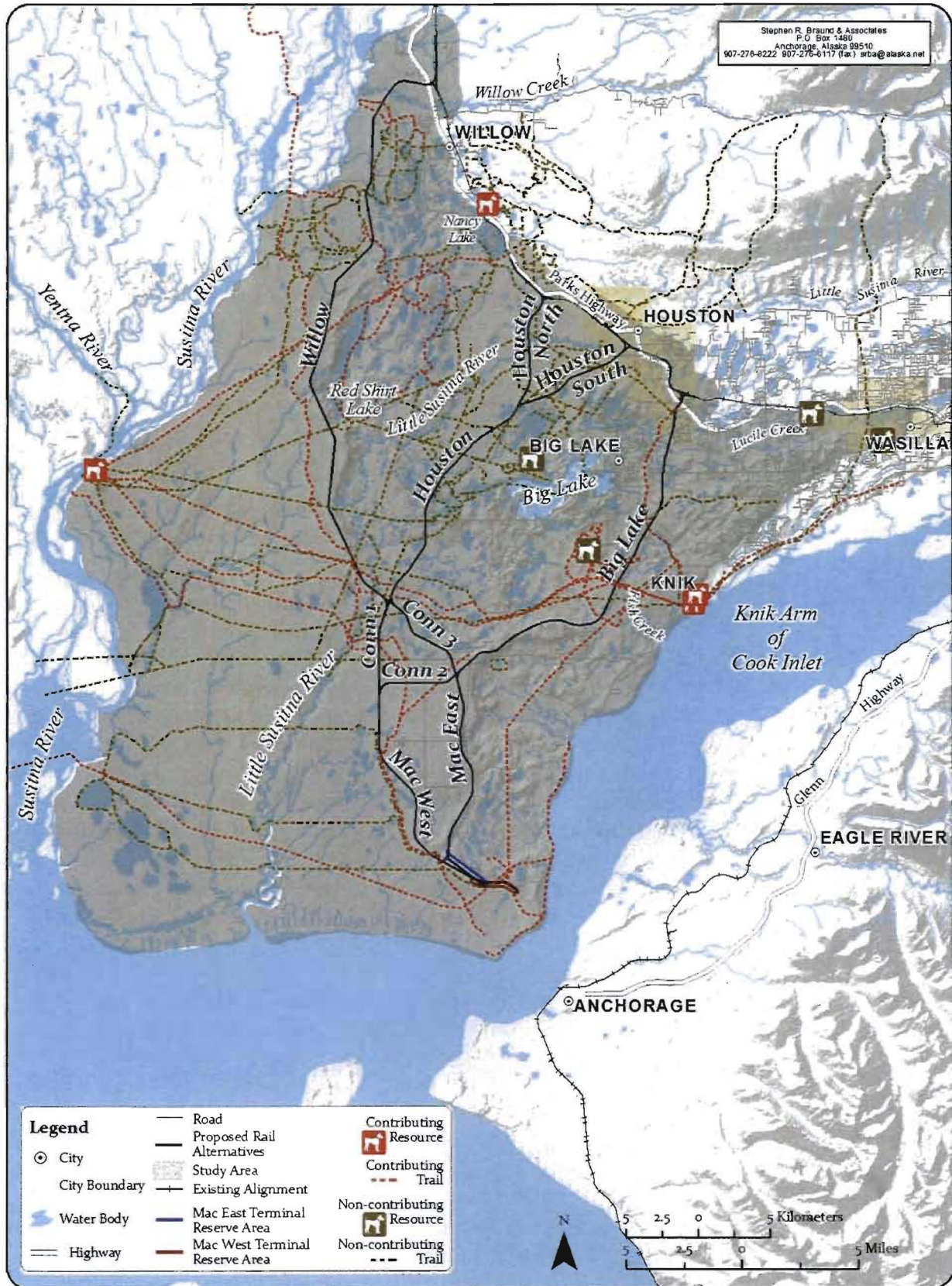


Figure 6-5. Dog Sledding Cultural Landscape

analysis that have integrity and are associated with the dog sledding landscape periods of significance. These 15 contributing trails include the Iditarod National Historic Trail, Iditarod Sled Dog Race Trail, Lucky Shot Trail, Corral Hill Trail, Flathorn Lake Trail, Nancy Lake-Susitna Trail, Red Shirt Lake-Nancy Lake Trail System, Herning Trail, Aurora Dog Mushing Club Trail System, the USGS Transmission Line Trail, and the five USGS Basemap Winter Trails in the study area. Non-contributing resources on Figure 6-5 include trails and other features which are associated with dog sledding but it is unknown at this stage of the research whether they relate to either period of significance or whether they retain integrity.

Recreation

Description

Long before the arrival of Europeans, Alaska Natives participated in cultural games, dancing, story telling, and other recreational activities requiring strength, endurance, agility, and concentration (ANKN, 2006). These activities reflected the skills and knowledge used on a daily basis by Native people to survive Alaska's harsh environment. Russians, and later Americans, brought with them their own forms of recreation. By the time of the great Alaska gold rush in the late 1890s, saloons and gambling halls provided miners an escape from the difficulties and often monotonous daily responsibilities of the miner's life. Dog sled races also appeared during this era as one form of winter recreation. Sporting activities such as baseball, tennis, and hockey became popular recreational activities. Rifle clubs also became popular during this time.

Knik, the largest town site in the study area during the gold rush era, offered many of the same recreational activities found in similar gold rush towns throughout Alaska. By 1915, recreational opportunities in Knik included three saloons, four hotels, a movie house, and a pool hall (MSB, 1985). The pool hall is only one of two buildings remaining from the original Knik town site and now serves as the Knik Museum and Dog Musers Hall of Fame.

Another area popular with recreational users today and in the past is the Big Lake area. Construction of the U.S. Army's Fort Richardson near Anchorage began in 1940. The Fort served as an important staging area for military operations in Alaska during World War II. In addition to serving as a training area, the Big Lake area quickly became a favorite recreational location for Army and Air Force personnel, particularly for the excellent fishing opportunities. Beginning in the late 1940s and 1950s, several bars and lodges opened in the Big Lake area to cater to the weekend recreationalists. During the 1960s, the study area saw a large influx of recreational users. Paving the road from Wasilla to Big Lake allowed more and more people to easily access Big Lake and enjoy the recreational opportunities the area provided. Popular summer and winter recreational activities included fishing, boating, water skiing, dog sledding, cross-country skiing, and snowmachining.

Soon, Anchorage and Matanuska-Susitna Valley residents were also enjoying recreational opportunities in other nearby areas, such as the Nancy Lake State Recreation Area established in 1966. Too wet for cultivation and lacking an abundance of minerals, the Nancy Lake area escaped large-scale settlement and development and quickly became another prime location for recreation and nature enjoyment (ADNR DOPR, 2008).

Today, winter and summer recreational opportunities in the study area continue to draw residents and tourists. The 2,000-mile-long Iron Dog snowmachine race, which began in 1984, starts in Big Lake, continues to Nome, and ends in Fairbanks. In recent years, the Iditarod Sled Dog Race has also moved its restart location from Wasilla to Willow due to lack of snow cover. The Aurora Dog Musher Club, which hosted the first Iditarod Dog Sled Race, continues to operate in the study area and dog sledding kennels are found in all the communities in the study area, including Knik, Big Lake, Houston, and Willow. Ski, snowmachine, and dog sled trails crisscross the study area and ice fishing continues to be a popular winter activity on many of the lakes. In summer, recreational use shifts toward fishing the lakes, rivers, and creeks for salmon and other fish, and camping, boating, and other outdoor activities. Willow Creek and the Little Susitna River are two of the most popular salmon fisheries in the area. As the population in the Matanuska-Susitna area continues to grow, it is likely that recreational use in the study area will continue to grow and more individuals discover the multiple recreational opportunities available in the study area. The diversity of recreational activities that interest a broad range of users sustains the popularity of this region as a recreational location for Matanuska-Susitna and Anchorage residents. As long as this quality remains, this area will continue to be one of the primary recreational areas in Southcentral Alaska.

Consideration of Eligibility

Other than the potential recreational landscape of dog sledding identified above, there do not appear to be other recreational cultural landscapes in the study area that are eligible for inclusion in the National Register. The recreational historical context of the study area does not appear to have national or state significance. Many of the properties in the area that might be locally significant to the theme of recreation in the Big Lake area have existed for fewer than 50 years and do not show "exceptional importance." Eligibility for exceptional importance requires a property to be associated with the extraordinary importance of an event or to an entire category of resources so fragile that the survivors of any age are unusual (NPS, 1997). Furthermore, should any recreational properties be determined to have exceptional importance, the integrity of many of these locations is likely low due to residential developments over the past 50 years. The Nancy Lake State Recreation Area, while likely retaining much of its historical integrity due to prohibitions on development in the area, is fewer than 50 years old.

For purposes of this analysis, recreation is not considered a cultural landscape eligible for inclusion in the National Register.

Homesteading

Description

As settlement of the United States Territories spread westward into less-populated and developed areas, American families sought to own and work these lands to support families and to grow profitable crops. Congress rejected a number of homestead bills for more than a decade until May 20, 1862, when President Lincoln signed the Homestead Bill into law (Hibbard, 1965). The purpose of the Homestead Act of 1862 was to stimulate growth and development of agricultural regions throughout the United States (BLM, 1954). On May 14, 1898, Congress extended homesteading rights to Alaska.

During the gold rush to the Matanuska and Susitna Valleys in 1903, settlers and disheartened gold seekers began settling in the valleys (MSB, 1994). The community of Knik, once a small Dena'ina Athabascan village, became the site of a trade center in Cook Inlet when entrepreneur George Palmer established a trading post there in 1887. Knik, having Upper Cook Inlet's northernmost port and a direct link to the interior along the historic Iditarod Trail, supplied gold seekers with needed goods and services during the gold rush. By 1915, the population of the Knik area had diminished from a one-time high of 500 individuals to only 132 settlers (MSB, 1985). Although there were a number of homesteaders in the area, after the railroad bypassed the community in 1915 many settlers abandoned Knik and moved to other communities or established new communities along the proposed rail line, including Wasilla, Palmer, and Ship Creek located to the north and east of Knik Arm. By 1917, Knik was nearly empty.

With the exception of the then-bustling town of Knik, few settlers inhabited the Matanuska and Susitna Valleys between 1898 and 1915. After development of the railroad and establishment of Anchorage in 1915, homesteaders with forethought and marketable agricultural products tried to situate themselves near large market areas or along railroad stops to have a means to transport their products. Anchorage was the largest local market for fresh items from the Matanuska Valley, and with the railroad passing through the Wasilla and Palmer areas, the two areas grew quickly into sizable communities.

Figure 6-6 shows the Public Land Survey System sections between and immediately adjacent to the proposed rail line alternatives in which homesteaders received title to their land. The title or homestead patent was granted after the homesteader had fulfilled all the requirements of the Homestead Act. The first homesteader in this area received title to their land beginning in 1920, with only an additional eight homesteaders receiving title between 1920 and 1948 (BLM, 2008). Although Wasilla and Palmer increased in population due to access along the railroad, the study area experienced less of a settlement influx. The study area had few roads through which settlers could access the land and access to most areas was limited to dog sled trails. The few settlers who did establish homesteads settled in rail-stop communities such as Willow and Houston. It is not known how many settlers established homesteads in the study area and either never applied for or failed to receive title to the land.

There was an increase in homesteaders in the area claiming title to their land between 1949 and 1970 (Figure 6-7). The numbers in Figure 6-7 reflect the years in which settlers received title to the land, being at least 3 years beyond the time of arrival. This figure shows a notable increase in patented homesteads in the study area in 1949 and during the 1950s, with a substantial increase in the early to mid-1960s. The year 1963 represents the peak homestead activity in the study area, with 54 patents. The beginning of the increase in homesteads coincided with the end of World War II and an influx of veteran soldiers returning to homestead in the area. Increased access to Alaska and the Matanuska-Susitna Valley became available via the Alcan Highway, and Glenn and George Parks Highways during this time. Access to the Big Lake area was upgraded in 1951 from a bumpy jeep trail to a rough gravel road that was eventually paved in 1961. The improvements to the Big Lake road in both 1951 and 1961 increased access to the area for settlement and recreation.

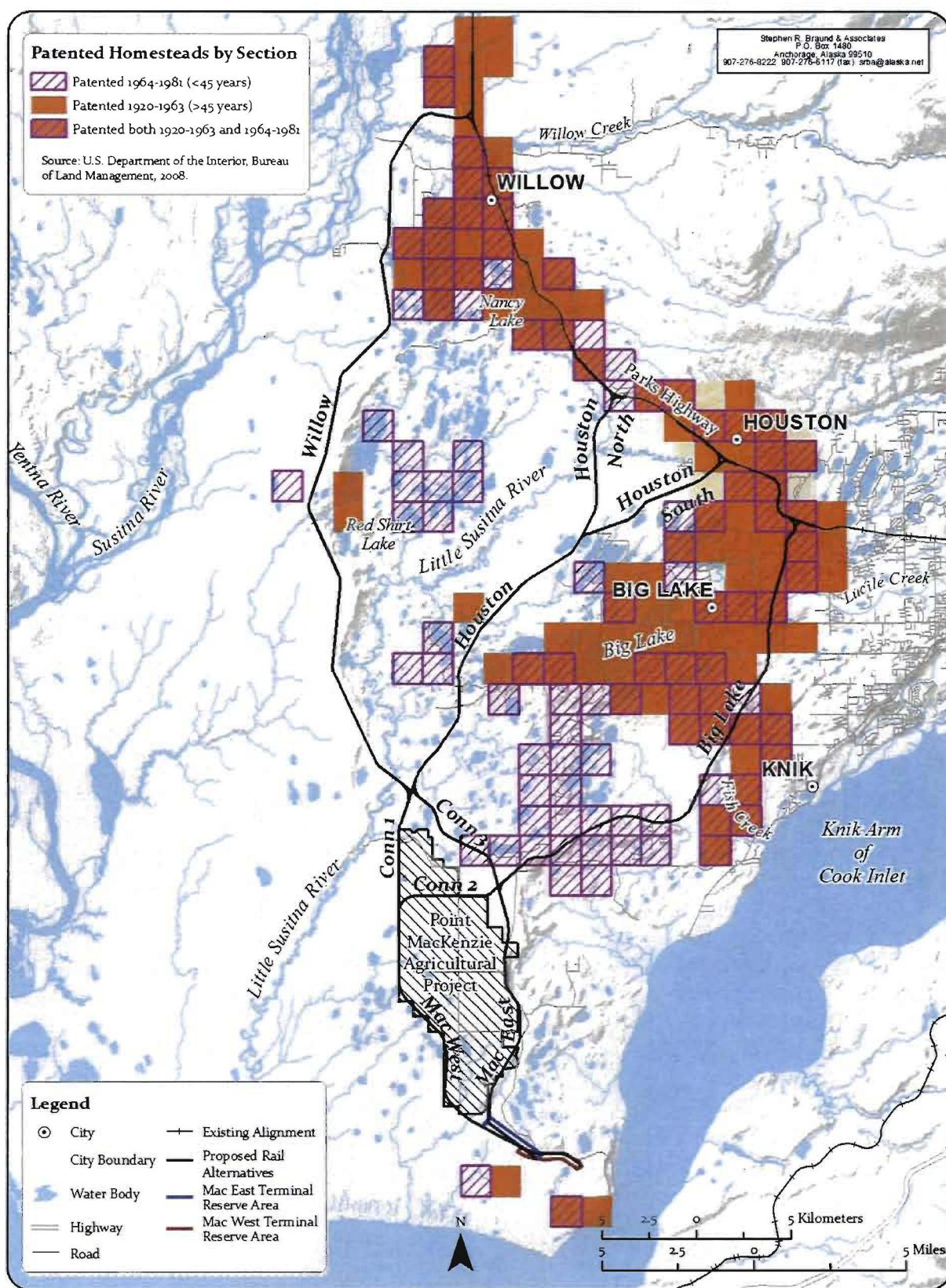


Figure 6-6. Patented Homesteads by Public Land Survey System Section, 1920 to 1981

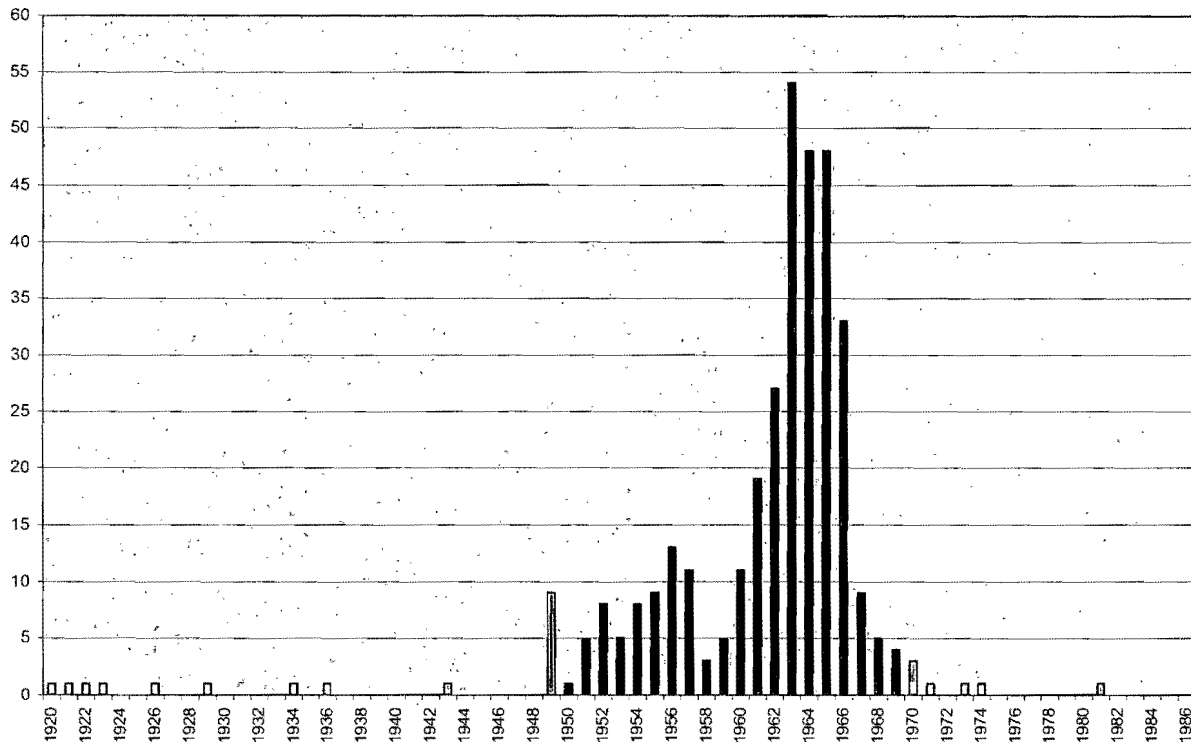


Figure 6-7. Patented Homesteads in the Study Area by Year

Homesteading in the area shown on Figure 6-6 decreased toward the end of the 1960s and into the 1970s. In 1967, only 9 homesteads received patents, down from 33 the previous year. The numbers of patented homesteads decreased each year until 1974. From that time, no homesteads received patents until 1981, the last year any homestead received a patent in the area between and immediately adjacent to the proposed rail line alternatives. The decline in homesteading coincided with the diminishing availability of large acre parcels along roads and the existing rail line.

Although the number of roads increased and homesteads extended farther beyond the railroad as the state built more roads in the Matanuska-Susitna Valley, much of the study area remained remote and inaccessible. The increase in the use of small airplanes aided homesteaders in reaching more remote areas. In 1977, Congress repealed the Homestead Act; however, the State of Alaska was exempt from the repeal of the Homestead Act until 1986 (BLM, 2001).

In total, 351 homesteads received patents in the Public Land Survey System sections between and immediately adjacent to the proposed rail line alternatives between 1920 and 1981. Of the 351 homesteads, 258 received patents during the 1960s. Today, as the Matanuska-Susitna Valley has developed into a suburb for people working in Anchorage, owners of homesteads and agricultural lands have sold and subdivided their land to accommodate the population growth. The economic returns are greater for selling the land for subdivision and development than selling the land as an intact homestead or developing it for agricultural purposes (Fowler, 1992).

Consideration of Eligibility

Preliminary analysis indicates that the homesteads in the area shown in Figure 6-6 do not appear eligible for inclusion in the National Register as a cultural landscape having state or national significance. When comparing the homestead settlement patterns in this area to those in the nearby Wasilla and Palmer areas, the Wasilla and Palmer areas are more representative of the United States and State of Alaska settlement patterns. Settlers claimed homesteads throughout the study area, built homes, and cultivated the land; however, these homesteads do not significantly contribute to the state or national historic contexts.

Individual homesteads in the study area might be eligible for inclusion in the National Register as a cultural landscape under Criterion A for their significance in the local historical context. These homesteads might be important in understanding the settlements of the Matanuska-Susitna Valley from 1948 through 1966, when a large number of homesteads received title. However, many homesteads and agricultural lands have since been sold and subdivided to accommodate population growth in the Matanuska-Susitna Valley. Thus, it is likely that the integrity of many homesteads in the study area is diminished.

For purposes of this analysis, homesteads are not considered a cultural landscape eligible for inclusion in the National Register.

Agriculture

Description

There has been little agriculture in the study area aside from the required cultivation of homestead lands. During Russian settlement of Alaska in the late 1700s and early 1800s, agriculture existed on a small scale to supplement Russian food needs. However, even with this agriculture, these settlers remained dependent on imported foods throughout their time in Alaska (Miller, 1975).

The building of the Alaska Railroad through the Matanuska-Susitna Valley, which began in 1915, brought an influx of settlers into the region. The railroad followed the northern reaches of the valleys from Wasilla to Houston to Willow, leaving large expanses of available homestead and agricultural lands to the south with no rail access. During these early years, most settlers in the study area established their homesteads along the railroad between Willow and Houston and eventually around Big Lake after access to that area improved. With inadequate transportation to move produce or crops to markets, commercial farmers were unable to make a profit. Aside from homesteaders growing small crops to feed themselves and their families, agriculture did not play any large role in the settlement of the study area. Agriculture did appear on a large scale in the Matanuska Valley in the mid 1930s with the creation of President Roosevelt's New Deal program. The New Deal, however, set aside most of these agricultural areas in the Matanuska Valley area around present-day Palmer and Wasilla.

In the early 1980s, the Point MacKenzie area eventually became host to the Point MacKenzie Agricultural Project (Figure 6-6) where 15,000 acres were divided into tracts for dairy farms, feed crops, and cattle ranches (Snodgrass *et al.*, 1982). Many of the farmers participated in the Point MacKenzie Dairy Project and sold their product to the Matanuska Maid milk processor in

Anchorage. Between 1985 and 1987, however, the state experienced a recession that adversely affected the farms when the price of milk dropped. Many farms eventually filed bankruptcy. Only two dairy producers in the Point MacKenzie Dairy Project were in business by 1992 (Fowler, 1992).

Consideration of Eligibility

Agriculture did not play an important role in the settlement and history of the study area. Aside from the agricultural project at Point MacKenzie in the 1980s, no substantial agricultural community ever became established in the study area. Most agricultural activities in the Matanuska and Susitna Valleys occurred and flourished in the Palmer and Wasilla areas to the east of the study area.

Because agriculture in the study area is not significant in the local, state, or national historic context, properties used for agriculture are not eligible for inclusion in the National Register as a cultural landscape. For purposes of this analysis, agricultural properties are not considered a cultural landscape eligible for inclusion on the National Register.

6.5 Environmental Consequences

All cultural resources found in the study area are assumed to be eligible for inclusion on the National Register unless otherwise noted. The determination of potential adverse impacts is based on whether the undertaking would result in effects to cultural resources sufficient to make the properties ineligible for inclusion in the National Register. This includes effects that would change the property's integrity of location, design, setting, materials, workmanship, feeling and/or association (36 CFR 60.4). As described in Section 6.4.3, there are several categories of cultural resources the project could affect, including archaeological sites, historic trails, buildings, structures and sites, and cultural landscapes. For those cultural resources found to meet National Register criteria within the area of potential effects, compliance with Section 106 regulations would also include an application of the criteria of adverse effect (36 CFR 800.5), as follows.

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Adverse effects on historic properties include, but are not limited to:

- (i) Physical destruction of or damage to all or part of the property;*
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not*

consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;

(iii) Removal of the property from its historic location;

(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long term preservation of the property's historic significance.

The NHPA Section 106 Programmatic Agreement (PA) being developed for this project (see Appendix J) would provide a mechanism to fully evaluate which properties are listed in or eligible for listing in the National Register, what their significant historic features are, and whether those properties would be adversely affected by the proposed project.

6.5.1 Proposed Action

6.5.1.1 Common Impacts

Construction of a rail line could possibly damage archaeological sites that cannot be avoided. Introduction of a rail line could have visual elements that reduce the integrity of the dog sledding cultural landscape. Rail operations, which are anticipated to be one to two trains per day, could introduce train noise effects to nearby structures of historic age. The dog sledding cultural landscape along the rail line could suffer long-term adverse effects due to trespassing concerns, and cultural privacy issues. In order for any of these potential effects to be considered adverse, the introduction of visual, atmospheric or audible elements would have to diminish the integrity of the property's significant historic features (36 CFR 800.5(2)(v)).

As concluded in Chapter 9, noise and vibration during construction and operations is not anticipated to be adverse. The estimated construction noise level would be below the Federal Transit Administration (FTA) criteria for an adverse impact. Similarly, estimated vibration levels from general construction activity would be below the FTA 0.20 inch per second fragile building damage criterion (FTA, 2006), so no building damage would be anticipated.

An increase of two trains per day along the existing main line would increase noise less than 3 dBA and would not cause adverse noise impacts. Based on the anticipated average train speed of 40 miles per hour on the proposed rail line, the contour for the FTA fragile building damage criterion would be 10 feet wide (5 feet on each side of the track centerline). There would be no buildings within 5 feet of the rail line, so there would be no damage to buildings due to vibration

from rail line operations. For an average speed of 40 miles per hour, the vibration annoyance contour along the proposed rail line would be 80 feet from the track centerline. There would not be any receptors within that distance, which would be within the proposed rail line's 200-foot right-of-way. Therefore, there would be no vibration impacts from proposed rail line operations.

Archaeological Sites

Archaeological sites in the rail line ROW could be inadvertently or purposefully destroyed through surface and subsurface disturbances, primarily during construction. Therefore, these sites would lose their eligibility for listing in the National Register. Such disturbances would include soil removal or other operations that could cause erosion or contamination and could destroy the context of the archaeological site and its overall integrity. The numerous salmon streams in the area are host to archaeological sites in and adjacent to the streambeds. Proposed rail crossings of these streams, and changes in stream flow, could affect those archaeological sites.

Historic Trails, Structures, and Sites

Cabins and other structures, and historic sites within the ROW would be disturbed or destroyed. Historic and potentially historic trails would be blocked in the case of unofficial trails. Officially recognized trails would be grade-separated or relocated, facilitating free passage; however, the integrity of any historic trails would still be adversely affected through the introduction of auditory and visual effects. Historic properties within 1 mile of the ROW could be adversely affected and lose their context and integrity through visual and audible effects. The sight of a railroad in the viewscape would be an adverse effect, as would the noise of passing trains, and construction and support vehicles. Trail blockage of officially recognized and unofficial trails could occur during construction, and unofficial trails would be blocked during rail line operation. Depending on the timing of construction activities and/or locations of installed crossings, some trail routes may be altered. Changes to dog sled, snowmachine, and all-terrain vehicle routes could cause the loss of access to or use of the trails and associated historic landscapes and properties. All of the alternatives would cross the Iditarod National Historic Trail, thereby increasing the visual and auditory effects on the historic integrity of the trail and its ancillary network.

Cultural Landscapes

The dog sledding cultural landscape would be adversely affected to varying degrees through loss of visual integrity, cultural privacy, potential loss of or changes to access, increased numbers of visitors or users, and changes to traditional or culturally significant use of and connection to the property. It is likely that the proposed rail line would affect the dog sledding cultural landscape, because noise and visual effects would reduce the quality of this landscape for users. Officially recognized trails would be grade-separated, thereby reducing impediments to free passage. However, the integrity of any historic trails would still be adversely affected through the introduction of auditory and visual effects, and access across the study area by dog sledders who travel across unofficial trails that are contributing resources to the dog sledding landscape would be impeded. Furthermore, contributing trails (e.g., Corral Hill Trail) that would not be crossed could be adversely affected by the proposed rail line if the rail line blocks non-contributing trails

(e.g., parts of the West Gateway Trail System) that are used to access the contributing trails (see Figure 6-5). Recreation, homesteading, and agriculture landscapes are not considered eligible for inclusion in the National Register, therefore no effects analysis is provided in this section because they are not historic properties.

6.5.1.2 Impacts by Rail Line Segment

Southern Segment Combinations

Mac West-Connector 1 Segment Combination

These segments would cross the historic Knik-Susitna Station mail trail (also known as the Iditarod National Historic Trail). There are six more known cultural resources outside the proposed ROW but within 1 mile of the centerline (Table 6-3). Much of these segments would cross wetlands and agricultural fields. Relatively little field survey was performed along this segment because wetlands and agricultural fields are considered to have a low probability for having cultural resources (Figure 6-2). Potential adverse effects could include diminishing the integrity of the historic trail, and potential indirect effects to an additional six known sites. An indirect impact to cultural resources would be one caused by proximity of the proposed rail line to cultural resources, which would result in the cultural resource being more vulnerable to damage by project personnel and/or rail line construction and operations. Six trails considered to be contributing resources to the dog sledding landscape would be intersected by the ROW for this segment combination (Table 6-3; Figure 6-5). One trail would be intersected more than once by this segment. Types of potential impacts to the contributing resources of the dog sledding landscape are discussed in 6.5.1.1 under *Cultural Landscapes* and would be the same for each segment combination except for the number of trails potentially affected.

Table 6-3
Southern Segments - Known Cultural Resources within the Project Area and Right-of-Way

Segment	Historic Trails Intersected by Right-of-Way	Known Cultural Resources within 200-Foot Right-of-Way	Additional Known Cultural Resources within Project Area ^a	Known Dog Sledding Contributing Resource Trails Intersected by Right-of-Way	Total
Mac West-Connector 1	1	0	6	6	13
Mac West-Connector 2	1	0	5	5	11
Mac East-Connector 3	1	4	11	1	17

^a Outside the 200-Foot ROW but within 1 mile of the centerline. One mile equals the maximum extent for potential indirect auditory and direct visual effects, as described in Section 6.2.

Mac West-Connector 2 Segment Combination

These segments would cross the Knik-Susitna Station mail trail, and approach five additional known cultural resources outside the proposed ROW but within 1 mile of the centerline. Much of these segments would cross wetlands and agricultural fields. Relatively little field survey was

performed along these segments because wetlands and agricultural fields are considered to have a low probability for having cultural resources (Figure 6-2). Potential adverse effects could include diminishing the integrity of one historic trail, and potential indirect effects to an additional five known sites. Five trails considered to be contributing resources to the dog sledding landscape would be intersected by the ROW for this segment combination (Table 6-3; Figure 6-5). One trail would be crossed multiple times by this segment.

Mac East-Connector 3 Segment Combination

These segments would cross the Knik-Susitna Station mail trail, and intersect four known cultural resources within the proposed ROW, and approach 11 known cultural resources outside the proposed ROW but within 1 mile of the centerline. Of the three southern segment combinations, this segment combination was surveyed the most because it has a relatively high probability for archaeological and historic sites (Figure 6-2). Potential adverse effects could include diminishing the integrity of one historic trail, the destruction or disturbance during construction of four known archaeological sites, and potential indirect impacts to 11 additional known cultural resources. One trail considered to be contributing resources to the dog sledding landscape would be intersected by the ROW for this segment combination (Table 6-4; Figure 6-5).

Table 6-4
Northern Segments - Known Cultural Resources within the Project Area and Right-of-Way

Segment	Historic Trails Intersected by Right-of-Way	Known Cultural Resources within 200-Foot Right-of-Way	Additional Known Cultural Resources within Project Area ^a	Known Dog Sledding Contributing Resource Trails Intersected by Right-of-Way ^b	Total
Willow	3	13	13	6	35
Big Lake	2	6	16	4	28
Houston-Houston North	1	0	7	2	10
Houston-Houston South	1	1	4	2	8

^a Outside the 200-Foot ROW but within 1 mile of the centerline. One mile equals the maximum extent for indirect auditory and direct visual effects, as described in Section 6.2.

^b Number may include historic trails identified under "Historic Trails Intersected by Right-of-Way" column

Northern Segment and Segment Combinations

Willow Segment

The Willow Segment would cross the Iditarod National Historic Trail and other trail systems, intersect 13 known cultural resources within the proposed ROW, and would approach an additional 13 known cultural resources outside the proposed ROW but within 1 mile of the centerline (Table 6-4). Field archaeology crews surveyed relatively few miles of this segment. However, the survey revealed numerous cultural resources within and near the ROW. This segment is also considered to have a high probability for containing cultural resources because it would cross relatively few wetland areas (considered to have low potential for cultural resources)

and would be near areas considered to have a high probability for cultural resources, such as areas with previously documented cultural resources, Dena'ina placenames, trails, streams, lakeshores, and ridgelines (Figure 6-2). Potential adverse effects could include diminishing the integrity of three historic trail crossings, disturbing or destroying 13 known archaeological sites during construction, and potentially indirectly affecting 13 additional known cultural resources. Parts of this segment have a history as a trail route for Dena'ina people traveling overland from Cook Inlet to villages at Red Shirt and other lakes and on to Talkeetna and other more distant places (Kari and Fall, 2003). Six trails considered to be contributing resources to the dog sledding landscape would be intersected by the ROW (Table 6-4; Figure 6-5). Several trails would be intersected more than once by this segment.

Big Lake Segment

This segment would cross the Iditarod National Historic Trail once and the Knik-Susitna Station mail route twice, and intersect six known cultural resources within the proposed ROW, and approach 16 additional known cultural resources outside the proposed ROW but within 1 mile of the centerline. This segment, with a substantial amount of dry, well-drained ground and elevated ridgelines, had the most field survey of the northern segments and is considered to have a high potential for cultural resources (Figure 6-2). The survey of this segment revealed a total of eight previously undocumented cultural resources. Potential adverse effects could include diminished integrity of 3 trail crossings, 6 archaeological sites disturbed or destroyed, and 16 additional cultural resources indirectly affected. Four trails considered to be contributing resources to the dog sledding landscape would be intersected by the ROW (Table 6-4; Figure 6-5). Some of these trails would be crossed multiple times in different locations along the Big Lake segment.

Houston-Houston North Segment Combination

These segments would intersect one historic trail and would approach seven additional known cultural resources outside the proposed ROW but within 1 mile of the centerline. Except for a short survey along a portion of the Houston Segment (Figure 6-2), this alternative segment received no additional field survey. However, much of the segment crosses large areas of wetlands, which have low potential for cultural resources. A few high- to moderate-probability areas along this segment include the stream crossings and elevated hummocks and hills in the ROW, which might host cultural resources. Proposed rail line construction and operations along this segment could indirectly affect seven known archaeological sites that are outside the ROW. Two trails considered to be contributing resources to the dog sledding landscape would be intersected by the ROW (Table 6-4; Figure 6-5).

Houston-Houston South Segment Combination

These segments would intersect one historic trail, one known cultural resource, an old ARRC railroad bridge within the proposed ROW, and would approach four other known cultural resources outside the proposed ROW but within 1 mile of the centerline. The area has numerous all-terrain vehicle trails, but none are presently listed as historic or potentially historic. Field archaeologists surveyed a small portion of this segment. The northern portion of this area appears to have been profoundly affected by the Miller's Reach fire and the area is covered with charred, fallen spruces; the southern portion would cross large areas of wetlands considered to

have a low potential for having cultural resources (Figure 6-2). Three of the known cultural resources near this segment are railroad associated, and additional railroad construction and activity would have no indirect adverse effect on these resources. Two trails considered to be contributing resources to the dog sledding landscape would be intersected by the ROW (Table 6-4; Figure 6-5).

Summary of Impacts by Alternative

Table 6-5 lists the eight rail line alternatives and the number of known cultural resources and dog sledding landscape contributing trails each could affect. The Mac East-Connector 3-Willow Alternative would affect the most known cultural resources and pass through areas with a high probability of having large numbers of undocumented cultural resources. The Mac West-Connector 1-Houston-Houston South Alternative would affect the fewest known cultural resources and pass through areas with a low probability (e.g., wetlands) of having large numbers of undocumented cultural resources (Figure 6-8).

Table 6-5
Summary of Impacts to Cultural Resources by Alternative^a

Alternative	Historic Trails Intersected by Right-of-Way	Known Cultural Resources within the 200-Foot Right-of-Way	Additional Known Cultural Resources within Project Area ^b	Known Dog Sledding Contributing Resource Trails Intersected by Right-of-Way ^c	Total
Mac East-Connector 3-Willow	4	17	23	7	51
Mac West-Connector 1-Willow	4	13	18	11	46
Mac East-Big Lake	2	10	23	4	39
Mac West-Connector 2-Big Lake	2	6	19	9	36
Mac East-Connector 3-Houston-Houston North	2	4	17	3	26
Mac East-Connector 3-Houston-Houston South	2	5	14	3	24
Mac West-Connector 1-Houston-Houston North	2	0	12	8	22
Mac West-Connector 1-Houston-Houston South	2	1	9	8	20

^a The numbers in Table 6-5 do not equal the sum of the numbers in Tables 6-3 and 6-4. The same cultural resource may have been within a mile of both a northern and southern segment and when the segments were combined in an alternative (as shown in Table 6-5) the cultural resource was only counted once.

^b Outside the 200-Foot ROW but within 1 mile of the centerline. One mile equals the maximum extent for indirect auditory and direct visual effects, as described in Section 6.2.

^c Number may include historic trails identified under "Historic Trails Intersected by Right-of-Way" column

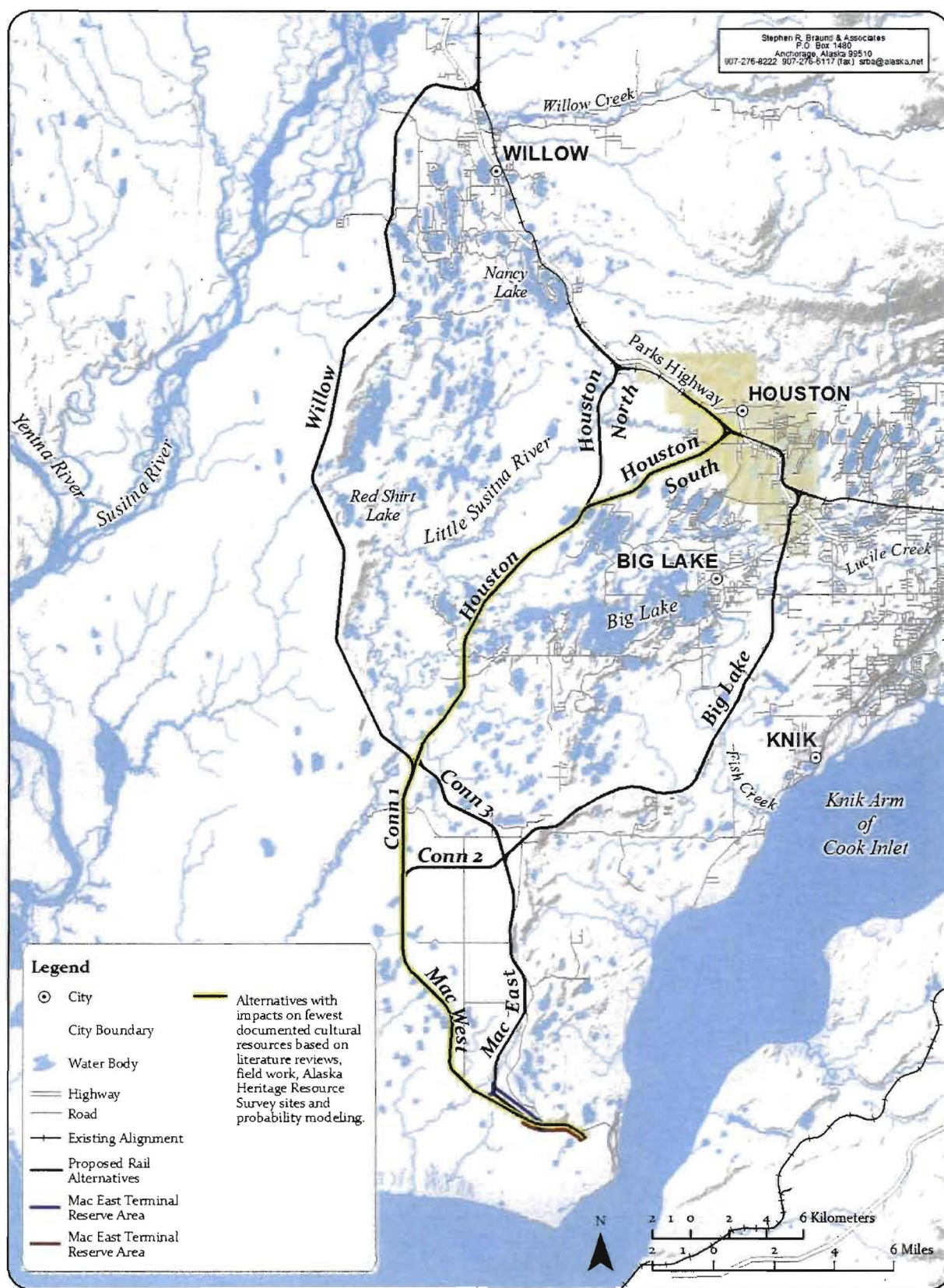


Figure 6-8. Alternative with Impacts on Fewest Documented Cultural Resources

Adverse effects to cultural resources could be mitigated by minor rerouting of any alternative that may be authorized by the Board, to avoid known cultural resources within the ROW. If avoidance is not possible, mitigation could include data recovery for archaeological sites, maintaining accessibility of historic trail crossings, implementing noise and vibration reduction measures, and minimizing visual impacts.

6.5.2 No-Action Alternative

Under the No-Action Alternative, ARRC would not construct and operate the proposed Port MacKenzie Rail Extension, and there would be no cultural resource impacts from the project.

Programmatic Agreement

SEA has developed a draft PA for the Port MacKenzie Rail Extension that would govern the completion of the Section 106 process (Appendix J). The regulations implementing Section 106 allow for the development of a PA when the effects on historic properties cannot be fully determined prior to approval of an undertaking (36 CFR 800.14.). The draft PA for the Port MacKenzie Rail Extension provides for the completion of the Level 2 identification survey if the Board authorizes the project. Additionally, the PA establishes responsibilities for the treatment of historic properties, the implementation of mitigation measures, and ongoing consultation efforts. Part of the ongoing consultation efforts related to the dog sledding cultural landscape will focus on further clarification and identification of features currently considered non-contributing resources for this EIS but requiring further investigation. As a part of this process, the integrity of these resources will become known and research will indicate whether they were constructed within the period of significance of the cultural landscape. If any additional contributing resources not identified in this EIS become known, potential effects will be assessed through the PA process. See *Tribal Consultation* below regarding how the results of consultation with the tribes will be incorporated into the PA and Section 106 process.

6.5.3 Tribal Consultation

Consultation with Native American tribes in the vicinity of the Port MacKenzie Rail Extension project area is ongoing. Consultation was initiated as part of the government-to-government consultation and coordination for this EIS process. A total of 10 Federally Recognized Tribes, tribal groups, and Alaska Native Regional Corporations have been contacted as part of the government-to-government consultation and coordination. Several consultation meetings to date regarding Section 106 consultation and cultural resource issues have occurred between SEA and the State Historic Preservation Office(r) (SHPO), Matanuska-Susitna Borough Historic Preservation Commission and Knik Tribal Council. As a result of the March 5, 2008 and February 24, 2009 consultation meeting with SHPO, four potential cultural landscapes of dog sledding, recreation, homesteading, and agriculture have been evaluated for eligibility to the NRHP and potential effects from the Port MacKenzie Rail Extension on eligible landscapes have been assessed for this EIS. Consultation meetings with the Knik Tribal Council and the Matanuska-Susitna Borough Historic Preservation Commission on February 27, 2009, April 3, 2009, and May 15, 2009 resulted in the identification of the additional potential Dena'ina cultural landscape. The May 15th consultation meeting also resulted in the suggestion to look at the dog sledding and Dena'ina landscapes in the broader theme of a potential transportation

landscape in the study area. Evaluation of the study area as a transportation landscape is ongoing and its eligibility or ineligibility for listing in the National Register will be determined during the Section 106 process through the PA.

In response to the consultation requests, documentation of the potential Dena'ina landscape began in June 2009 with a series of interviews with Dena'ina respondents living near and within the study area. These interviews focused on identifying landscape characteristics that typified historic uses and questions regarding continued use of the study area as part of an ongoing Dena'ina cultural legacy. Landscape characteristics identified during this process included circulation features (e.g., trails and water routes), archaeological sites, land use, and cultural traditions. This documentation as well as evaluation of the integrity of identified Dena'ina landscape characteristics is ongoing. Any additional information about the landscape's potential eligibility that is acquired through consultation, research, or field investigation after the DEIS will be included in the FEIS. If the Dena'ina cultural landscape is determined eligible, potential effects would be analyzed and mitigated through the Section 106 process and PA mechanism.

EXHIBIT 7
DRAFT EIS, APPENDIX B

APPENDIX B
TRIBAL AND GOVERNMENT-TO-
GOVERNMENT CONSULTATION

B. TRIBAL AND GOVERNMENT-TO-GOVERNMENT CONSULTATION

This appendix contains the Section of Environmental Analysis's (SEA's) consultation plan (at the end of the appendix) and written correspondence with federally recognized tribes, tribal groups, and Alaska Native Regional Corporations. The consultation plan includes as an attachment to the plan, the tribal consultation letter template. The letter from SEA to the Native Village of Eklutna on February 12, 2008, is representative of eight others sent to tribal entities introducing them to the project and process, and informing them of upcoming public scoping meetings. The second letter is a sample letter sent to Eklutna, Incorporated on August 15, 2008, which is representative of eight others sent to tribal entities initiating formal government-to-government consultation. It includes a sample blank questionnaire that was sent to all 8 recipients of this letter.

Table B-1 lists all of the tribal entities with which SEA has corresponded and their dates of correspondence. Copies of correspondence between SEA and the tribal entities on the dates listed in Table B-1 follow the table.

Table B-1	
Dates of Correspondence with Tribal Entities Consulted	
Tribal Entity	Dates of Correspondence
Federally Recognized Tribes	
Native Village of Eklutna	2/12/08; 8/15/08; 2/5/09
Native Village of Tyonek	2/12/08; 8/15/08; 2/5/09; 9/03/08
Tribal Groups	
Cook Inlet Tribal Council	2/5/09
Chickaloon Village Traditional Council	2/12/08; 8/15/08; 2/5/09
Knik Tribal Council	2/12/08; 8/15/08; 2/5/09; 3/23/09 (see Appendix A for this letter)
Alaska Native Regional Corporations	
Cook Inlet Region, Incorporated	2/12/08; 8/15/08; 2/5/09
Chickaloon-Moose Creek Native Association, Incorporated	2/12/08; 8/15/08; 2/5/09
Eklutna, Incorporated	2/12/08; 8/15/08; 2/5/09; 3/16/09
Knikatu, Incorporated	2/12/08; 8/15/08; 2/5/09; 8/20/08
Tyonek Native Corporation	2/12/08; 8/15/08; 2/5/09



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

February 12, 2008

Don Karabelnikoff
Tribal Administrator
Native Village of Eklutna
26339 Eklutna Village Road
Chugiak, Alaska 99567

Re: STB Finance Docket No. 35095, The Alaska Railroad Corporation – Petition for Exemption to Construct and Operate a Rail Line Extension to Port MacKenzie, Alaska

Dear Mr. Karabelnikoff:

I am writing you on behalf of the Surface Transportation Board, a Federal agency based in Washington, DC. The Board is responsible for the economic regulation of freight railroads, and considers requests by freight railroads to construct and operate new rail lines. The Board is interested in your views regarding a new rail line construction proposal (described below). We are particularly interested in the proposed rail line construction's potential effects to tribal lands, rights, resources, religious and cultural sites and subsistence activities. At your request, we can meet with you to hear your views and provide additional information regarding the Board and its environmental review process. In addition, you are cordially invited to attend the scheduled public scoping meetings. If you plan to submit written comments, we appreciate receiving them by the close of the scoping comment period on **March 21, 2008**.

Description of the Proposal

The Alaska Railroad Corporation intends to file a petition with the Surface Transportation Board (Board), pursuant to 49 U.S.C. 10502, requesting authority to construct and operate a new rail line from Matanuska-Susitna Borough's Port MacKenzie to the existing Alaska Railroad Corporation rail system. The Board would be the Federal agency responsible for granting authority for the construction and operation of the proposed new rail line and for conducting government-to-government consultations with Federally-recognized tribes under Executive Order 13175 (65 FR 218), Consultation and Coordination with Indian Tribal Governments. The Section of Environmental Analysis (SEA) is the office within the Board responsible for preparing the appropriate National Environmental Policy Act (NEPA) documentation for railroad construction and operation cases that come before the Board.

The proposed Port MacKenzie Rail Extension would involve the construction and operation of a new rail line connecting the Matanuska-Susitna Borough's Port MacKenzie in south-central Alaska to a point on the Alaska Railroad Corporation main line between Wasilla and north of Willow, Alaska (see attached map). The proposed rail line would provide freight services between the Port and Interior Alaska and would support the Port's continuing development as an intermodal and bulk material resources export and import facility. Major elements of the proposed rail extension would include between 30 and 45 miles of new railroad track; a 200-foot-wide right-of-way; crossings of local roads, streams, trails, and utility corridors; sidings; and ancillary facilities. The anticipated train traffic would be two trains daily on average, with one train per day traveling in each direction.

The Board's Environmental Review Process

SEA initiated the scoping process for the preparation of an Environmental Impact Statement (EIS) for the Port Mackenzie Rail Extension Project with the publication of the Notice of Intent (NOI) to prepare an EIS in the *Federal Register* on February 12, 2008 and will be traveling to Alaska March 3rd through March 12th for public scoping meetings and meetings with Federal, state and local agencies and interested Federally-recognized tribes.

As I explained above, the Board is interested in your views regarding the project's potential effects to tribal lands, rights, resources, religious and cultural sites and subsistence activities. At your request, we can meet with you to hear your views and provide additional information regarding the EIS process. In addition, you are invited to attend the scheduled public scoping meetings. If you plan to submit written comments, we appreciate receiving them by the close of the scoping comment period on **March 21, 2008**.

The purpose of the NOI (copy attached) is to notify individuals and organizations interested in or affected by the proposed project of the decision to prepare an EIS and provide the draft Scope of Study for review and comment.

The public scoping meetings will be conducted using a workshop format during which interested persons may ask questions about the proposal and the Board's environmental review process, and advise SEA staff about potential environmental effects of the project. In keeping with the workshop format of the scoping meetings, there will be no formal presentations made by agency representatives. Rather, SEA staff will be available to answer questions and receive comments individually. Scoping meeting dates and locations are provided below.

DATES AND LOCATIONS: Public scoping meetings will held from 5 PM to 8 PM as follows:

DAY	DATE	LOCATION	ADDRESS
Monday	March 3, 2008	Knik Elementary School	6350 West Hollywood Wasilla, AK 99654
Tuesday	March 4, 2008	Big Lake Elementary School	3808 South Big Lake Road Big Lake, AK 99652
Wednesday	March 5, 2008	Willow Area Community Center	Mile 70 Parks Highway Willow, AK 99688
Thursday	March 6, 2008	Houston Middle School	12801 W. Hawk Lane Houston, AK 99694
Monday	March 10, 2008	Wasilla Multi-Use Sports Complex	1001 S. Mack Drive Wasilla, AK 99654
Tuesday	March 11, 2008	Anchorage Senior Center	1300 East 19 th Avenue Anchorage, AK 99501

Further information on the process for conducting government-to-government consultations for this project with Federally-recognized tribes under NEPA and other Federal laws will be provided in the near future.

David Navecky is SEA Project Manager for the project. ICF International is serving as the independent third-party consultant to SEA to assist with the NEPA review process. Alan Summerville is ICF's Project Manager for the project. If you have any questions or would like to arrange a meeting to discuss the project please do not hesitate to contact David Navecky at (202) 245-0294 or Alan Summerville at (703) 934-3616.

Sincerely,



Victoria Rutson
Chief
Section of Environmental Analysis

Attachments



SURFACE TRANSPORTATION BOARD

Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

August 15, 2008

Curtis McQueen, CEO
Eklutna, Incorporated
16515 Centerfield Dr., Suite 201
Eagle River, AK 99577

Re: STB Finance Docket No. 35095, The Alaska Railroad Corporation – Petition for
Exemption to Construct and Operate a Rail Line Extension to Port MacKenzie, Alaska

Dear Curtis McQueen:

The purpose of this letter is initiate formal government-to-government consultation regarding the referenced project.

The Surface Transportation Board's (Board) previous letter of February 12, 2008 informed you of the proposed project and of our responsibility for preparing the appropriate National Environmental Policy Act (NEPA) documentation for railroad construction and operation cases that come before the Board, and for conducting government-to-government consultations with Federally recognized tribes under NEPA and other Federal laws.

The Board is interested in your views regarding the project's potential effects to Tribal lands, rights, resources, religious and cultural sites and subsistence activities. At your request, we can meet with you to hear your views and provide additional information regarding the Environmental Impact Statement process.

Your timely response will greatly assist us in incorporating your concerns into project development. For that purpose, we respectfully request that you complete the enclosed Project Consultation Options form and return it to us at your earliest convenience.

If you have any questions or would like to discuss the project please do not hesitate to contact Dave Navecky of my staff, at 202-245-0294 or Alan Summerville of ICF International, our independent third-party contractor, at 703-934-3616.

Sincerely,



Victoria Rutson
Chief
Section of Environmental Analysis

Enclosures:

ARRC Port MacKenzie Rail Extension Project Description
Environmental Review Process Description
Consultation Questionnaire

CONSULTATION QUESTIONNAIRE

Eklutna, Incorporated

Project Name: Port MacKenzie Rail Extension Project Environmental Impact Statement

STB Finance Docket No. 35095, The Alaska Railroad Corporation – Petition for Exemption to Construct and Operate a Rail Line Extension to Port MacKenzie, Alaska

Please check the appropriate response(s) from the list below and use the back of this form or additional sheets if you wish to make comments:

☐ We have no interests associated with this proposed project and further consultation is not required.

☐ There are or may be issues of concern associated with this proposed project and we request further consultation. We prefer:

☐ Meeting with the Board and cooperating agencies at a tribal facility.

☐ Communication with the Board and cooperating agencies by scheduled teleconference.

☐ We want to continue to receive project information by mail and participate in the public involvement process.

Name of **Eklutna, Incorporated** designated contact for this proposed project:

Please print

Phone: _____

email: _____

Signed: _____

Date: _____

Please mail to:

David Navecky
STB Finance Docket No. 35095
Surface Transportation Board
395 E Street, SW
Washington, D.C. 20423-0001



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

February 5, 2009

SEE DISTRIBUTION LIST

Re: STB Finance Docket No. 35095 - Section 106 Process for the Alaska Railroad Corporation's Petition for Exemption to Construct and Operate a Rail Line Extension to Port MacKenzie, Alaska

To whom it may concern:

The Alaska Railroad Corporation (ARRC) proposes to build a rail connection to the Matanuska-Susitna Borough's port at Port MacKenzie – referred to as the Port MacKenzie Rail Extension. A license from the Surface Transportation Board (STB) is a prerequisite for the construction and operation of the proposed rail line by ARRC. As part of the process in considering whether to grant such a license, the STB has initiated the Section 106 consultation process for the project with the State Historic Preservation Officer (SHPO), under the National Historic Preservation Act. The purpose of this letter is to ask the assistance of your tribal organization in identifying cultural resources, including traditional cultural properties, in the Port MacKenzie project area, and to learn whether your organization is interested in participating as a Consulting Party in the Section 106 process for this project.

Background

The Section of Environmental Analysis (SEA) is the office within the STB responsible for preparing the appropriate documentation for compliance with the National Environmental Policy Act as well as Section 106 of the National Historic Preservation Act. SEA is preparing an Environmental Impact Statement (EIS) to evaluate the potential environmental impacts of the proposed Port MacKenzie Rail Extension, including consideration of potential impacts to cultural resources. ICF International is serving as the independent third-party consultant to assist SEA with the EIS. Stephen R. Braund & Associates (SRB&A) is the cultural resources subcontractor to ICF International.

The proposed Port MacKenzie Rail Extension would connect Port MacKenzie to the existing ARRC rail system at a point between Wasilla and north of Willow, Alaska. The extension would require construction of between approximately 30 and 45 miles of new railroad track within a 200-foot right-of-way (ROW). Ten segments that form eight

possible alternative routes are currently being considered (see attached figures). The longest alternative route currently under consideration would connect to the existing ARRC rail line north of Willow, near Mile 190 of the George Parks Highway, and the shortest would connect to the rail line near Mile 167 of the George Parks Highway. Possible stream and river crossings include the Little Susitna River, Lake Creek, and Willow Creek as well as other small streams, depending on the specific alternative route. The proposed rail extension also would cross local roads, recreational trails, pipelines, and utilities. Additional elements of the proposed project include a siding along the existing rail line, and railroad support facilities including a terminal facility in the port district, access roads and communication towers.

Cultural Resources Review

Initial examination of the Alaska Heritage Resource Survey (AHRs) records revealed 43 documented cultural resource sites within one mile of the alternative ROW routes; one of sites has been found eligible for listing on the National Register of Historic Places (National Register). SRB&A is completing a review of the AHRs files, a review of previous surveys near the Area of Potential Effect (APE), and a review of available literature pertaining to the project area. The STB is also initiating consultation with potential Consulting Parties on this project, including Native American tribal organizations. A field survey and additional consultations with local Native groups, the SHPO, and other interested parties will be completed, as warranted. Interested parties will be kept informed of any new field activity.

Ways You May Choose to Participate

The attached form provides you with several options on how you may choose to participate in ongoing consultations. The STB also requests your assistance in identifying cultural resources in the proposed project area. Please refer to the attached figures depicting the project area including the alternative routes. We are requesting information about places that you believe could be affected by the proposed project so that we can consider impact avoidance strategies. If you have information regarding cultural resources that could be affected by the proposed project, please identify and describe the subject properties, and return that information with the enclosed form. We also would be pleased to discuss with you any confidential concerns you may identify, as well as project details.

Your timely response will greatly assist us in incorporating your concerns into the EIS. For that purpose, we respectfully request that you complete the enclosed consultation options form and forward it to SEA within thirty days of your receipt of this correspondence. If we do not receive a response from you by March 16, 2009, we will assume that you have no concerns regarding historic properties that could be affected by the proposed project.

If you have any questions about the project please do not hesitate to contact Dave Navecky, SEA Project Manager, at 202-245-0294, or Alan Summerville, ICF International Project Manager, at 703-934-3616. Thank you for your time and effort in assisting us.

Sincerely,



Victoria Rutson
Chief
Section of Environmental Analysis

cc: Alan Summerville, ICF International
Stephen R. Braund & Associates

Enclosures:
Figures 1-6
Project Consultation Options Form

Distribution List:

Native Village of Eklutna
26339 Eklutna Village Road
Chugiak, Alaska 99567
Dorothy Cook, President
Phone: 907-688-6020
Fax: 907-688-6021

Eklutna, Incorporated
16515 Centerfield Dr., Suite 201
Eagle River, AK 99577
Curtis McQueen, Chief Executive Officer
Phone: 907-696-2828
Fax: 907-696-2845

Knik Tribal Council
PO Box 871565
Wasilla, Alaska 99687-1565
Jack Alcorn, Executive Director
Phone: 907-373-7991

Fax: 907-373-2161

Knikatu, Incorporated
P.O. Box 872130
Wasilla, Alaska 99687-2130
Raymond Theodore, President
Phone: 907-376-2845
Fax: 907-376-2847

Native Village of Tyonek
PO Box 82009
Tyonek, Alaska 99682-0009
Angela Sandstol, President
Phone: 907-583-2201
Fax: 907-583-2442

Chickaloon Village Traditional Council
P.O. Box 1105
Chickaloon, AK 99674-1105
Gary Harrison, Chief
Phone: 907-745-0707
Fax: 907-745-0709

Tyonek Native Corporation
1689 C St., Suite 219
Anchorage, AK 99501-5131
Donita Hensley, President
Phone: 907-272-0707
Fax: 907-274-7125

Chickaloon-Moose Creek Native Association, Inc.
P.O. Box 875046
Wasilla, AK 99687
Edith Baller, President
Phone: 907-373-1145
Fax: 907-373-1004

Cook Inlet Tribal Council
3600 San Jeronimo Dr.
Anchorage, AK 99508
Gloria O'Niell, President and Chief Executive Officer
Phone: 907-793-3600
Fax: 907-793-3602

Cook Inlet Region, Inc.
2525 C Street, Suite 500
P.O. Box 93330
Anchorage, Alaska 99509-3330
Margaret L. Brown, President and Chief Executive Officer
Phone: 907-274-8638
Fax: 907-263-5183

CONSULTATION QUESTIONNAIRE

Native Village of Tyonek

Project Name: Port MacKenzie Rail Extension Project Environmental Impact Statement

STB Finance Docket No. 35095, The Alaska Railroad Corporation – Petition for Exemption to Construct and Operate a Rail Line Extension to Port MacKenzie, Alaska

Please check the appropriate response(s) from the list below and use the back of this form or additional sheets if you wish to make comments:

- ☐ We have no interests associated with this proposed project and further consultation is not required.
- ☐ There are or may be issues of concern associated with this proposed project and we request further consultation. We prefer:
- ☐ Meeting with the Board and cooperating agencies at a tribal facility.
- ☐ Communication with the Board and cooperating agencies by scheduled teleconference.
- ☒ We want to continue to receive project information by mail and participate in the public involvement process.

Name of Native Village of Tyonek designated contact for this proposed project:

Ethan Kaufman
Please print

Phone: 583-2201
email: ethan-ka@tyonek.net

Signed: Angela D. Sandstel

Date: 9-3-08

Please mail to:

David Navecky
STB Finance Docket No. 35095
Surface Transportation Board
395 E Street, SW
Washington, D.C. 20423-0001

**Options for Consultations with the Surface Transportation Board
Regarding the Alaska Railroad Corporation's Proposed Port MacKenzie Rail Extension**

Eklutna, Incorporated

Requested Consultation Status

Please check the appropriate response(s) from the list below and use the back of this form or additional sheets if you wish to make comments:

- ☐ There are no known traditional religious or cultural places present or within the vicinity of the proposed project and further consultation is not requested.
- ☐ There are or may be traditional religious or cultural resources present or within the vicinity of the proposed project, further consultation is requested, and we would like to be considered a Consulting Party.
- ☐ We will continue consultations for this proposed project directly with the Surface Transportation Board Section of Environmental Analysis (SEA), further consultation is requested, and we would like to be considered a Consulting Party.
- ☒ We have no interest associated with this proposed project and further consultation is not required.

Contact Information

If you have chosen to participate in further consultation with SEA, please indicate the manner in which you wish to continue consultation by providing the relevant contact information below:

Mail Address:

Phone:

Fax:

E-mail:

Other (please describe):

Printed Name of Designated Contact for this Project

Phone: _____

Signed: Curtis McQueen

Curtis McQueen, Chief Executive Officer

Date: 3/16/09

Please mail to: Dave Navecky, SEA Project Manager, Surface Transportation Board, 395 E Street, SW
Washington, DC 20423. Or, fax to: Dave Navecky at 202-245-0454

Rec'd 3/31/09

EI-15639

CONSULTATION QUESTIONNAIRE

Knikatnu, Incorporated

Project Name: Port MacKenzie Rail Extension Project Environmental Impact Statement

STB Finance Docket No. 35095, The Alaska Railroad Corporation – Petition for Exemption to Construct and Operate a Rail Line Extension to Port MacKenzie, Alaska

Please check the appropriate response(s) from the list below and use the back of this form or additional sheets if you wish to make comments:

☐ We have no interests associated with this proposed project and further consultation is not required.

☒ There are or may be issues of concern associated with this proposed project and we request further consultation. We prefer:

☒ Meeting with the Board and cooperating agencies at a tribal facility.

☐ Communication with the Board and cooperating agencies by scheduled teleconference.

☒ We want to continue to receive project information by mail and participate in the public involvement process.

Name of **Knikatnu, Incorporated** designated contact for this proposed project:

Raymond Theodore
Please print

Phone: (907) 376-2845
email: knikcorp@cci.net

Signed: Raymond Theodore

Date: August 29, 2008

Please mail to:

David Navecky
STB Finance Docket No. 35095
Surface Transportation Board
395 E Street, SW
Washington, D.C. 20423-0001

Surface Transportation Board Environmental Impact Statement on Alaska Railroad Corporation's Proposed Port MacKenzie Rail Extension

Government-to-Government Consultation and Coordination Plan

Introduction

Executive Order (EO) 13175 (65 FR 218), Consultation and Coordination with Indian Tribal Governments (November 6, 2000) directs Federal agencies to establish regular and meaningful consultation and collaboration with officials of Federally recognized Tribal Governments (Tribes) in the development of Federal policies or decisions that have Tribal implications. The Environmental Impact Statement (EIS) for Alaska Railroad Corporation's (ARRC) proposed Port MacKenzie Rail Extension will culminate in a decision by the Surface Transportation Board (Board) and, as appropriate, subsequent permit decisions by other Federal agencies that constitute Federal decisions subject to the provisions of EO 13175. The Federal agencies that are cooperating in the preparation of the EIS for this project are the U.S. Army Corps of Engineers – Alaska District, Federal Railroad Administration, and U.S. Coast Guard – Seventeenth Coast Guard District.

The proposed Port MacKenzie Rail Extension has the potential to directly affect the environment, resources and rights of Tribes located in south-central Alaska in the vicinity of the Knik Arm, Big Lake and the Little Susitna River. Potential effects to Tribal lands, rights, resources, religious or cultural sites and subsistence activities need to be identified, evaluated and discussed with Tribal Governments in order to comply with EO 13175, Section 106 of the National Historic Preservation Act of 1966 (see also 36 CFR Part 800, August 5, 2001) and other Federal regulations and policies.

Federally Recognized Tribal Governments in the Project Area

The U.S. Department of Interior, Bureau of Indian Affairs maintains a list of 561 Federally Recognized Tribes (73 FR 66, April 4, 2008). Alaska Tribes in proximity to the proposed Port MacKenzie Rail Extension have been identified from this list. Proximity is defined as in or near the Little Susitna River and Knik Arm watersheds. The following Tribes, Tribal groups and Native corporations were notified by letter dated February 12, 2008 of the scoping process for the Port Mackenzie Rail Extension EIS, and have been advised that further information regarding government-to-government coordination would be forthcoming.

FEDERALLY RECOGNIZED TRIBES

Chickaloon Village Traditional Council
Knik Tribal Council
Native Village of Eklutna
Native Village of Tyonek

ALASKA NATIVE CORPORATIONS

Chickaloon-Moose Creek Native Association, Inc.
Cook Inlet Region, Inc.
Eklutna, Incorporated
Knikatnu, Incorporated
Tyonek Native Corporation

Objectives of Consultation and Coordination

Consultation and coordination is the process of seeking, discussing, and considering the views of Tribes. Two-way communication that works toward consensus and reflects the concerns of the affected Tribes is the primary objective for the Board's consultation and coordination plan. Tribal sovereignty, culture, traditional values and customs will be respected during the consultation process.

The Board, U.S. Coast Guard and Federal Railroad Administration do not have specific guidance documents for consultation and coordination with Tribal Governments. The U.S. Army Corps of Engineers – Alaska District is the only Federal cooperating agency with established guidance. The Board considered this guidance, as well as guidance documents from the U.S. Department of Defense, U.S. Environmental Protection Agency - Region 10, and the State of Alaska while

developing this consultation and coordination plan for the Port MacKenzie Rail Extension EIS. Specific objectives for consultation include:

1. Engage all potentially affected Tribes early in the EIS process to identify issues that should be researched and analyzed in the EIS.
2. Maintain open and active communications with Tribes throughout the EIS process to identify places of traditional religious or cultural importance and potential effects to Tribal lands, rights, resources or subsistence activities in the vicinity of the proposed project.
3. Report to the Tribes in a credible and understandable manner on issues and concerns raised during the scoping process.
4. Respond to issues raised by the Tribes during scoping and on the Draft EIS.
5. Respond to issues raised by the Tribes on the Final EIS.

Implementation Plan

Providing Tribes with the opportunity to participate in the public scoping process is not the same as government-to-government consultation and coordination. At a minimum, Tribal Governments will be given an opportunity to consult at the start of the project and again prior to decision making. Additional coordination will take place as determined necessary or desirable by the Board, cooperating agencies and Tribal Governments. The following sequence of actions will be completed:

1. Contact each Tribal entity (as listed in Section 2.0) by telephone to confirm the name, title and address of current leadership.
2. Transmit a Tribal Consultation Initiation letter and Consultation Questionnaire to each Tribal entity describing the EIS and government-to-government consultation and coordination process, describing the proposed project and soliciting Tribal input on potential effects of the proposed project on Tribal lands, rights, resources, religious or cultural sites and subsistence activities. The consultation questionnaire offers several options for Tribal consultation.
 - Face-to-face meetings with the Board and cooperating agencies at a Tribal facility,
 - Scheduled teleconferences with the Board and cooperating agencies,
 - No further involvement in government-to-government consultation during the EIS process, or
 - Continued receipt of project information by mail and participation through the public involvement process.
3. Conduct initial meetings or teleconferences with interested Tribes and develop an agreement and process for continued consultation and coordination throughout EIS development.

4. Document the government-to-government coordination with each Tribe for inclusion in the EIS and Administrative Record.

Attachments

Tribal consultation materials include:

- Tribal Consultation Initiation letter
- Port MacKenzie Rail Extension Project Description
- Environmental Review Process Description
- Consultation Questionnaire
- Preliminary List of Tribal Contacts



SURFACE TRANSPORTATION BOARD

Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

August __, 2008

Recipient (*Tribal Organization*)

Contact Name, Title

Address 1

Address 2

City, State Zip Code

Re: STB Finance Docket No. 35095, The Alaska Railroad Corporation – Petition for Exemption to Construct and Operate a Rail Line Extension to Port MacKenzie, Alaska

Dear (*Contact Name*):

The purpose of this letter is initiate formal government-to-government consultation regarding the referenced project.

The Surface Transportation Board's (Board) previous letter of February 12, 2008 informed you of the proposed project and of our responsibility for preparing the appropriate National Environmental Policy Act (NEPA) documentation for railroad construction and operation cases that come before the Board, and for conducting government-to-government consultations with Federally recognized tribes under NEPA and other Federal laws.

The Board is interested in your views regarding the project's potential effects to Tribal lands, rights, resources, religious and cultural sites and subsistence activities. At your request, we can meet with you to hear your views and provide additional information regarding the Environmental Impact Statement process.

Your timely response will greatly assist us in incorporating your concerns into project development. For that purpose, we respectfully request that you complete the enclosed Project Consultation Options form and return it to us at your earliest convenience.

If you have any questions or would like to discuss the project please do not hesitate to contact Dave Navecky of my staff, at 202-245-0294 or Alan Summerville of ICF International, our independent third-party contractor, at 703-934-3616.

Sincerely,

Victoria Rutson
Chief
Section of Environmental Analysis

Enclosures:

ARRC Port MacKenzie Rail Extension Project Description
Environmental Review Process Description
Consultation Questionnaire

CONSULTATION QUESTIONNAIRE

(Tribal Organization)

Project Name: Port MacKenzie Rail Extension Project Environmental Impact Statement

STB Finance Docket No. 35095, The Alaska Railroad Corporation – Petition for Exemption to Construct and Operate a Rail Line Extension to Port MacKenzie, Alaska

Please check the appropriate response(s) from the list below and use the back of this form or additional sheets if you wish to make comments:

☐ We have no interests associated with this proposed project and further consultation is not required.

☐ There are or may be issues of concern associated with this proposed project and we request further consultation. We prefer:

☐ Meeting with the Board and cooperating agencies at a tribal facility.

☐ Communication with the Board and cooperating agencies by scheduled teleconference.

☐ We want to continue to receive project information by mail and participate in the public involvement process.

Name of (Tribal Organization) designated contact for this proposed project:

Please print _____

Phone: _____
email: _____

Signed: _____

Date: _____

Please mail to:

David Navecky
STB Finance Docket No. 35095
Surface Transportation Board
395 E Street, SW
Washington, D.C. 20423-0001

PRELIMINARY LIST OF TRIBAL CONTACTS

Tribal Governments

Don Karabelnikoff, Tribal Administrator
Native Village of Eklutna
26339 Eklutna Village Road
Chugiak, Alaska 99567

Jack Alcorn, Executive Director
Knik Tribal Council
PO Box 871565
Wasilla, Alaska 99687-1565

Angela Sandstol, President
Native Village of Tyonek
PO Box 82009
Tyonek, Alaska 99682-0009

Gary Harrison, Chief
Chickaloon Village Traditional Council
P.O. Box 1105
Chickaloon, AK 99674-1105

Alaska Native Corporations

Curtis McQueen, CEO
Eklutna, Incorporated
16515 Centerfield Dr., Suite 201
Eagle River, AK 99577

Raymond Theodore, President
Knikatu, Incorporated
P.O. Box 872130
Wasilla, Alaska 99687-2130

Michaelene Stephan, President
Tyonek Native Corporation
1689 C St., Suite 219
Anchorage, AK 99501-5131

Edith Baller, President
Chickaloon-Moose Creek Native Association, Inc.
P.O. Box 875046
Wasilla, AK 99687

Margaret L. Brown
President and Chief Executive Officer
Cook Inlet Region, Inc.
2525 C Street, Suite 500
P.O. Box 93330
Anchorage, Alaska 99509-3330

References

Additional consultation reference materials include:

- EO 13175, Consultation and Coordination with Indian Tribal Governments
- U.S. EPA, Region 10, Tribal Consultation Framework
- U.S. Department of Defense, American Indian and Alaska Native Policy
- U.S. Army Corps of Engineers, Alaska District Tribal Policy
- State of Alaska Administrative Order No. 186
- List of Federally Recognized Tribes (73 FR 66, April 4, 2008)

EXHIBIT 8
LETTER FROM THE ALASKA SHPO TO
SEA, DATED JULY 23, 2008

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS AND OUTDOOR RECREATION

OFFICE OF HISTORY AND ARCHAEOLOGY

SARAH PALIN, GOVERNOR

550 W. 7TH AVENUE, SUITE 1310
ANCHORAGE, ALASKA 99501-3565
PHONE: (907) 269-8721
FAX: (907) 269-8908

July 23, 2008

File No.: 3130-1R Surface Transportation Board

SUBJECT: Rail Line Extension to Port MacKenzie, Alaska
Initiation of Section 106 consultation

Victoria Rutson
Chief, Section of Environmental Analysis
Surface Transportation Board
Office of Economics, Environmental Analysis and Administration
Washington, DC 20423

Dear Ms. Rutson,

The State Historic Preservation Office received on June 23, 2008, your letter and the attached document titled *Cultural Resources Work Plan: Proposed Port MacKenzie Rail Extension Project, Port MacKenzie to Willow, Alaska STB Finance Docket No. 35095* by Stephen R. Braund & Associates (June 5, 2008). We have reviewed the referenced undertaking under Section 106 of the National Historic Preservation Act and have the following comments:

Definition of area of potential effect:

The *Cultural Resources Work Plan* defines the area of potential effect (APE) for direct effects as the 200 foot right-of-way and the construction footprint of other project components such as staging areas and material sources; the *Plan* also acknowledges that the APE for indirect effects is likely larger (page 5-6). Once we receive a more completely defined APE that includes future cumulative and other indirect effects we will be able to comment on the APE.

Study area and predictive model:

According to *Cultural Resources Work Plan*, the study area is defined as 1 mile on either side of alignment (p. 10). Cultural landscapes, historic districts and traditional cultural properties may be difficult to recognize by looking only at corridors. Instead, we encourage Surface Transportation Board to expand the study area to include the Susitna River-east/Willow/ Houston/Knik/Port MacKenzie region when identifying cultural resources and developing the predictive model. The ground truthing surveys may focus on the corridors. Remember also to involve the other consulting parties regarding the predictive model and the types of cultural resources that may be present in the project area.

The variables of the predictive model appear reasonable and we look forward to receiving the resulting GIS map showing the levels of cultural resource probability throughout the project area.

Methodology for completing Section 106 consultation:

We understand that the Section 106 process will be phased and combined with NEPA in accordance with 36 CFR 800.4 (b)(2), 800.5(a)(3) and 800.8 (c). To ensure that the requirements of the Section 106 process will be adequately covered, we developed the following outline based on our understanding of the

Cultural Resources Work Plan (pp. 8-12). The only changes we made were the addition of involving consulting parties at each step and developing only one legal agreement.

- Description of affected environment; *36 CFR 800.4* (Identify historic properties):
 - Literature review and back ground research of the project area
 - Describe previously reported cultural resources in project area
 - Develop a predictive model for cultural resources
 - Ground truth the model in summer of 2008
 - Involve consulting parties
- Determination of environmental consequences; *36 CFR 800.5* (Assess adverse effects):
 - Assume National Register eligibility of properties unless previously determined not eligible
 - Describe potential effects (both direct and indirect) to historic properties as a result of each alternative
 - Involve consulting parties
- After selection of final alternative; *36 CFR 800.4 and 800.5*:
 - Pedestrian survey and sub-surface testing of the area of potential effect
 - Archaeological report with evaluations of National Register eligibility and recommendations regarding assessment of effect.
 - Involve consulting parties
 - Concurrence by SHPO of Surface Transportation Board's findings
- *36 CFR 800.6* (Resolution of adverse effects)
 - Will follow a programmatic agreement between STB and SHPO included in the EIS document
 - Involve consulting parties

Legal agreements

The *Cultural Resources Work Plan* states that a memorandum of agreement for mitigating adverse effects to the Iditarod National Historic Trail will be developed in addition to a programmatic agreement (p. 12). Under Section 106, only one legal document is necessary for an undertaking. Mitigation for Iditarod National Historic Trail should be incorporated into the PA.

Please contact Stefanie Ludwig (269-8720) or Doug Gasek (269-8726) if you have any questions or if we can be of further assistance.

Sincerely,



Judith E. Bittner
State Historic Preservation Officer

JEB:sll

Cc: Fran Seager-Boss, Matanuska-Susitna Borough